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A Sustainable Management Model for New Egyptian Cities

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Abstract

This study aims to identify the mechanisms and frameworks for urban transformations required to achieve sustainable management in new Egyptian cities, achieving harmony and balanced interaction with the natural system in the context of social life, and rational resource management that meets current and future human needs while raising society's standard of living. Because of their efficiency in improving the management of new cities in Egypt, the study underlined the importance of adopting the guidelines as sequential measures for a sustainable urban environment management. The research has resulted in a model for long-term administration in new Egyptian cities, which contributes to the application of its concepts and principles in a balanced framework across all dimensions (political, administrative, and institutional) and recommends means for implementing these rules at the city level in order to establish sustainable urban communities concerned with enhancing the urban environment in order to accomplish Egypt's Vision 2030.

Keywords: New Urban Communities, Sustainable Urban Management, Legal framework,



1. Introduction

Since the mid-seventies, the Egyptian government has been on a mission to create a number of new cities in consecutive generations to serve as new urban centres. The New Urban Communities Authority was founded by Law (No. 59 of 1979), but because the expected management system for the urban community in the new cities was not defined, its subordination to the administrative organization fluctuated in the state throughout the years of development, this indifference became the primary impediment to the desired development program.

The Ministry of Housing, Utilities, and New Urban Communities has followed the central method in drafting general plans for new cities over the previous decades, resulting in a picture of urbanization twenty years after the date of preparation, the project was a comprehensive plan that defined land use distribution, population, housing programs, services, and industrial uses. Furthermore, each city planned to house a specific amount of people. This confirmed that the administrative method used had flaws, necessitating research into the current method of urban management in and linking it to the pillars of urban new Egyptian cities sustainability in order to develop an effective administrative model capable of achieving sustainable development for these cities [2].

1.1. Research Problem

The problem stems from a conflict of interests and overlapping responsibilities regarding the administration of new city life. The study shows that there is a lack of an effective administration capable of attaining long-term development and thereby improving the quality of life. To avoid the deterioration of the urban environment in these new communities, all of these elements necessitated a thorough investigation.

1.2. Research Objective

The goal of this study is to design a model for an efficient administrative structure that meets the long-term development goals of metropolitan areas. It also aims to construct and establish administrative organizations capable of meeting the administrative and service needs of the new communities' citizens, in order to serve as a model framework for long-term management in Egypt's new cities.

1.3. Research Methodology

The research relies on the inductive approach to examine and analyse the theoretical concepts of sustainable management and the global approaches supporting it. In addition, the analytical and comparative technique was used to examine certain worldwide approaches to sustainable management with the aim of developing a sustainable management model fit for the new Egyptian cities.

2. The organizational structure of the Ministry of Housing, Utilities and New Urban Communities

Figure (1) shows the organizational structure of urban management in the new Egyptian cities including the Ministry of Housing and Utilities and new urban communities, and is divided into the following categories [3]:

- Administration of Public Services in New Cities.
- New Urban Communities Authority.
- City Development Agency.

At the same time, the city council assists both: the Board of Trustees of the City, and the Association of City Investors.

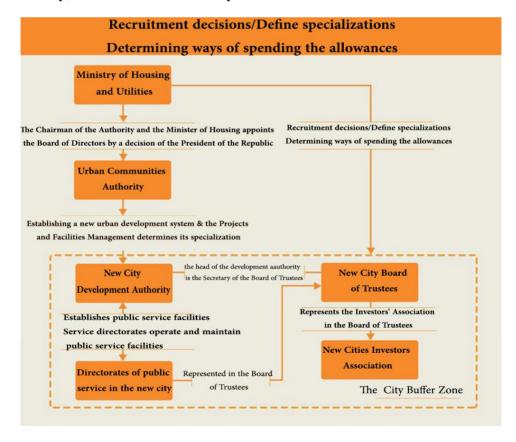


Figure 1. The organizational structure of the Ministry of Housing, Utilities and New Urban Communities



The following points are the weaknesses and reasons of flaws in the administrative system and organizational structures in the urban management of new cities:

- Employing inept and untrustworthy personnel in leadership positions in the state's organizational structure.
- The lack of management practices required to attain the intended objectives.
- The lack of executive planning and specific finance mechanisms that were linked to each other, causing certain projects to be delayed in their implementation.
- The lack of specified and integrated programs that arrange public and private sector activities to achieve specific time-bound goals, resulting in a lack of integration of initiatives conducted by both sectors.
- The lack of assessment and follow-up procedures, as well as measurement standards, have resulted in the initial stages of newest cities ending without any attempt to review this stage, determine the reasons for success and failure, and so alter the policies followed.
- The database is not at the required level for rapidly changing and developing urban societies, as information plays an important role in determining the administration's efficiency and effectiveness, as information is used in all administrative processes, including goal-setting, planning, and decision-making, as well as monitoring and performance evaluation.

In terms of the basic pattern of public administration, which is characterized by vertical hierarchy and the submission of all legislation, economic and investment programs to the approval of the central administration, the current situation of the administrative system in the new Egyptian cities is similar to that of traditional government administrations (government). As a result, the fundamental decisions are made outside the authority of the new city and the current urban management method used in the new Egyptian cities [4].

The new Egyptian cities' urban management is an executive administration, i.e., a central administration, whereas the decentralized interactive administration is the most effective at achieving proper urban development, demonstrating the ineffectiveness of the current administration in the new cities. This necessitates the construction of an efficient administrative framework that keeps up with these changes while also considering the urban environment in these new urban meetings.

As a result, implementing a new long-term management system became unavoidable.

3. The legal framework for urbanization in Egypt's new cities

(Law 59 of 1979), which stipulated the establishment of a "New Urban Communities Authority" as an independent legal entity, under which the law of public bodies would apply and which would be considered the state office in establishing and developing new cities and villages, was the first piece of legislation in the management of new Egyptian cities.

This authority would be in charge of developing, drafting, implementing, and monitoring plans, policies, and programs for the establishment of new urban settlements in conformity with the state's economic and social development plan and general policy.

Article (50) of the New Urban Communities Establishment Law mandates that newly created urban communities be handed over to local administration units after all components and basic facilities have been completed, whereas Article (27) of the Local Administration System Law mandates that the governor assume all executive powers and competencies assigned to ministers in his area of competence as head of all local agencies and utilities, supervising national utilities, the completed regions of the new cities, on the other hand, have not yet been passed to the local administration [5].

As a result, the governor's and the head of the new urban community development agency (chosen by a decree of the Minister of Housing, Utilities, and New Urban Communities), whose city is part of the governorate, have overlapped in their responsibilities. As a result, it should be highlighted that this law has introduced the status of a single authority to oversee urbanization and new city lands. According to article 13 of the statute creating the authority, it also gave the authority the jurisdiction to manage its lands in accordance with development projects, and it also handed the Urban Communities Authority all of the authorities and resources of the localities. Furthermore, it made no mention of housing project objectives or how to manage cities with a population that is only partially occupied [6].

On the other hand, in 2010, a presidential decree No. 160 was issued, consisting of four articles to reorganize the competencies of granting building and operating licenses for commercial and industrial zones, in which it was decided that the minister in charge of internal trade and industrial affairs would assume the competencies. previously held by the Ministers of Municipal and Rural Affairs and Housing, Utilities, and New Urban Communities.

It is worth noting that commercial and industrial regions are among the services that are available, starting from the date of this order, the Minister in Charge of Trade and Industry Affairs is entitled to define these regions for a period



of five years, and this would be applied in new cities in accordance with the terms of the Unified Building Law (No. 119 of 2008).

Hence, there is a new overlap between the Industrial Development Authority and the presidency of the city department, which necessitates the adoption of a new system based on continuous legislative development in order to keep up with the rapid development of new Egyptian cities and achieve long-term city management.

Accordingly, the following points can be concluded:

- There is a lack of complete assessment of the urban environment's needs in all of its components.
- A shortage of fundamental life items due to a lack of long-term profit investment.
- There is a deficiency in long-term planning.
- A misalignment of the industries, housing, and services sectors.-
- A lack of developed legislation dealing with the nature of living in those cities
- A multitude of government agencies that administer the lives of the citizens
 of those cities
- An overlap in competencies between the responsible authorities of the country

4. Trends in Support of Sustainable Urban Environment Management

New ideas and shifts in some ideas about new cities and their preservation plans emerged throughout the last decade of the twentieth century [8]. Additionally, the concept of new city values has shifted from cultural to integrated value, as has the concept of originality, which has shifted from architectural to social and functional originality. It's worth noting that the concept of sustainability and continuous development has emerged, resulting in a fundamental shift in how these cities think about policies, culminating in the necessity for sustainable cities.

Environmentally Sustainable Urban Management. The administration is concerned with creating a healthy and urban environment, preserving natural resources to the greatest extent possible, and reducing urban pollution to the greatest extent possible through planning that considers the capabilities or environmental load, ensuring that development projects and their ambitions do not exceed the critical environmental limit, Furthermore, it satisfies both current and future requirements.

4.1. The earlier most significant experiment contributed to strengthening the idea of Sustainable Management, for example.

- 4.1.1 The following issues were addressed by the Sustainable Cities Program in 1990:
 - A technical assistance initiative to improve local capacity to manage and plan the urban environment.
 - A global programmed to allow the sharing of experiences and talents across cities, with the goal of stimulating and motivating technical and financial resources.
 - As a result, the Sustainable Cities Program's primary goal is to "assist cities in developing necessary and effective capacities for managing and planning the urban environment.
- 4.1.2 The 1992 Earth Summit and the accompanying Agenda No.21 addressed a number of fundamental principles, which are described as follows [9]:
 - Cross Sectoral Coordination.
 - Decentralization.
 - Participatory Approaches.
 - The International Centre for Local Environment Development in Canada has developed a method for guiding the local management of the urban environment in a sustainable manner, the title of this item was Planning Guide for the Local Agenda No. 21. It was an initiative that aimed to execute guiding projects in as many as 20 towns around the world, the local agenda 21, which comprises strategies for managing the urban environment, specific work plans, collaboration goals, and the capital spent in projects in the selected cities, was created as a result of these projects [10].

4.1.3 The 1996 Habitat Conference

The Second United Nations Conference on Human Settlements (Habitat II) was held in Istanbul in 1996, highlighting the importance of working together to integrate priorities at the local and global levels through a new perspective of the urban environment and the evolving relationship between development and the urban environment, first proposed at the 1992 conference, in which the basic ideas about urban and economic development had also changed [11].

This led to the discovery that the fundamental roadblocks to attaining sustainable development are restricted administrative capacities, not a lack of technology or capital.



Generally, the discussion focused on three major issues:

- To achieve economic and social prosperity, sustainable development is necessary.
- Deterioration of the urban environment stymies progress.
- Deterioration of the environment is invite.

4.2 Global Programs Supporting Sustainable Urban Management

There are four categories of programs that support cities:

- The first category: Programs supporting guiding projects for the management and planning of the urban environment.
- The second category: Programs advocating the establishment of communication networks among cities to share knowledge and experience.
- The third category: Programs providing specialized experts and information about the management and planning of the urban environment.
- The Fourth Category: Programs supporting the development of applied researches related to the management and planning of the urban environment.

The research focuses on the first, third, and fourth categories of programs, with the first category concerned with developing guiding projects specialized in urban management and planning, the second category with establishing communication networks among cities to exchange experiences on managing the urban environment, and the fourth category with supporting and developing applied research directly related to the man-made environment, these three categories are all connected to urban planning ,the third group, on the other hand, is not relevant to our research since it focuses on specialist experiences and approaches in sectors such as health, food, and environmental technology, which are often thought to be unrelated to urban issues, though they do occasionally intersect

As a result, the idea of urban environmental management discussed here covers the following dimensions:

- The necessity of precisely selecting and defining goals, including identifying priority issues through public participation.
- The significance of establishing the duties and responsibilities required to achieve the desired goals, highlighting the importance of seamless integration and coordination among obligations.
- The significance of resource mobilization, control, and crucial coordination in achieving the intended goals.

- The importance of preparing work plans based on what was specified in the previous points (objectives, defining responsibilities, available resources).
- The importance of following up and monitoring performance efficiency, whether in terms of achieving targets, responsibilities, coordination among them, or the extent of having resource control.

Consequently, the concept of sustainable urban management is linked to achieving a sustainable urban environment that is compatible with the local environment, as well as achieving harmony and balanced interaction with the natural system in the context of social life, through rational management of natural resources that would meet current and future human needs and raise community living standards [12].

5 Dimensions of the Proposed Model

The three dimensions (political/administrative/institutional) are integrated pillars of the proposed system, and they must be considered together by those responsible for managing the urban environment, as well as legislators, programmers, and decision-makers. Figure 2 illustrates the basic dimensions of a sustainable management of the urban environment, while Figure 3 illustrates the analysis of these dimensions. In summary, any development plan or methodology for accomplishing the proposed model must take into account the three dimensions (political, administrative, and institutional) to ensure its success, since in practice they overlap and are interconnected [13].

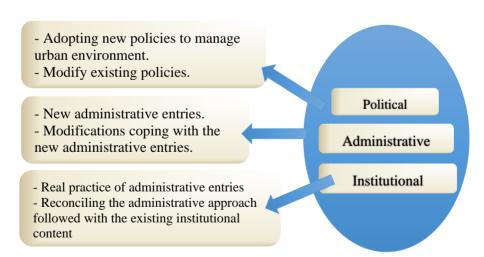


Figure 2. The basic dimensions of a sustainable management of the urban Environment



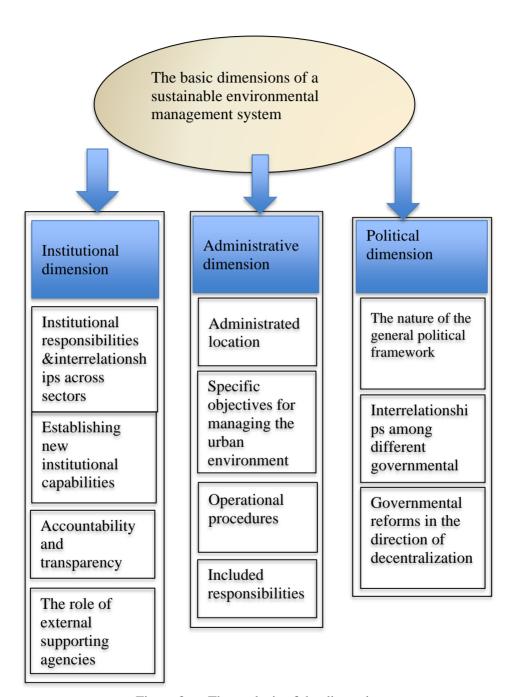


Figure 3. The analysis of the dimensions

6 Globally Proposed Approaches for Sustainable Urban Environment Management

6.1 Environmental Planning & Management Approach (EPM)

The UN Centre for Human Settlements, in collaboration with the UN Environment Program (UNEP), has analysed a large number of experiences in cities around the world, focusing on effective and innovative entry points that have been implemented on the basis of a central focus on the actual physical environment management and planning system. Using the information gathered from these experiences, UNEP and Habited have proposed a set of guidelines that reflect "the lessons learned through these experiences as a useful framework of input for the global implementation of the urban environment agenda," despite significant differences in physical, economic, social, or political situations.

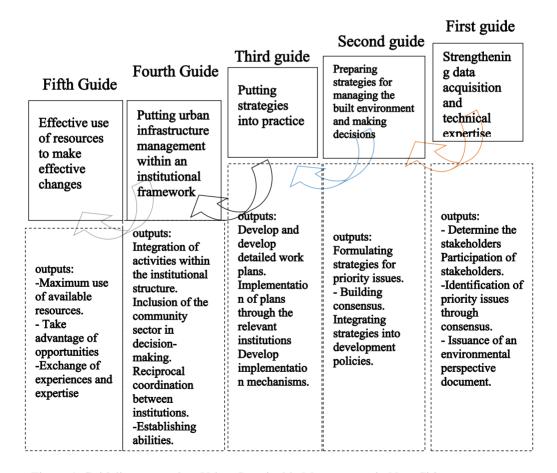


Figure 4. Guidelines toward an Urban Sustainable Management in New Cities



These guides are grouped under five main headings as shown in Figure 4 as sequential steps for sustainable management of the urban environment [13].

Different phases of the Built Environment Management and Planning (EPM) Approach

- a Rapid Assessment and Consultation
- b Environmental Management Strategy (EMS)
- c Environmental Action Planning (EAP)
- d Follow-up and Consolidation

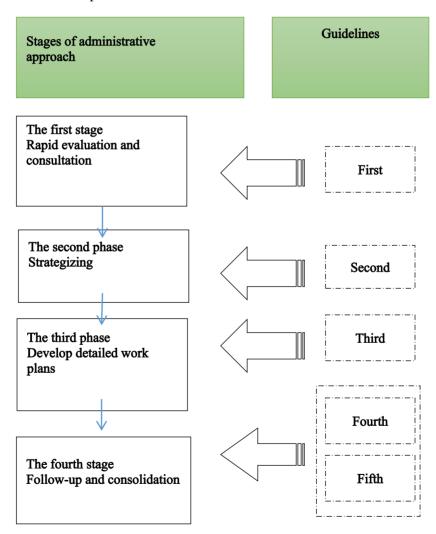


Figure 5; shows the relationship between the guidelines and the stages of the urban environment management and planning approach.

6.2 Local Agenda 21 - Approach (LA21)

At the 1992 Earth Summit, Agenda 21, the Sustainable Development Agenda 21, was adopted, with chapter 28 of Agenda 21 stating: Local authorities should establish, operate and maintain environmental, social and economic facilities; oversee the overall planning process; develop local environmental policies and laws; and support the implementation of national environmental policies. Local authorities are the closest level of government to the people. They therefore play a vital role in guiding, stimulating and responding to the public's desires. To achieve sustainable development, it sets out a number of objectives for the new blueprint system for sustainable management of the built environment:

- a. Create a unified vision
- b. Assessing existing local conditions
- c. Negotiate strategies and commitments
- d. Create a framework for the sustainable implementation of those strategies

Key stages of Local Agenda 21 entry

- a. Forming community participation
- b. Analysis of societal issues
- c. Detailed action plans
- d. Implementation and monitoring
- e. Evaluation and feedback

The "Local Agenda 21 Planning Guide" presents a participatory planning system that can be used to improve the efficient functioning of localities, to leverage available resources in the community and to address the challenges of sustainable development at the local level The next section illustrates the key stages for sustainable management of the physical environment presented by the Local Agenda Planning Guide 21, as shown in Figure 7.

Figure 8 shows the comparative analysis between the Built Environment Management (EPM) approach and the Local Agenda 21 (LA21) portal with regard to the basic dimensions of a sustainable built environment management system.



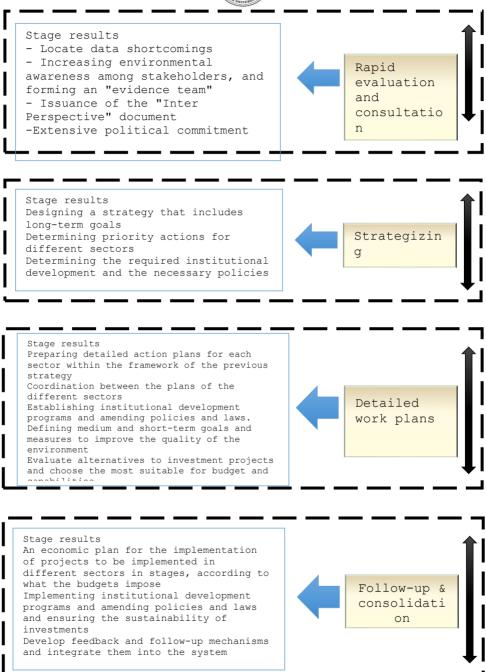


Figure 6. Analysis of the urban environment management and planning approach showing the results of each stage

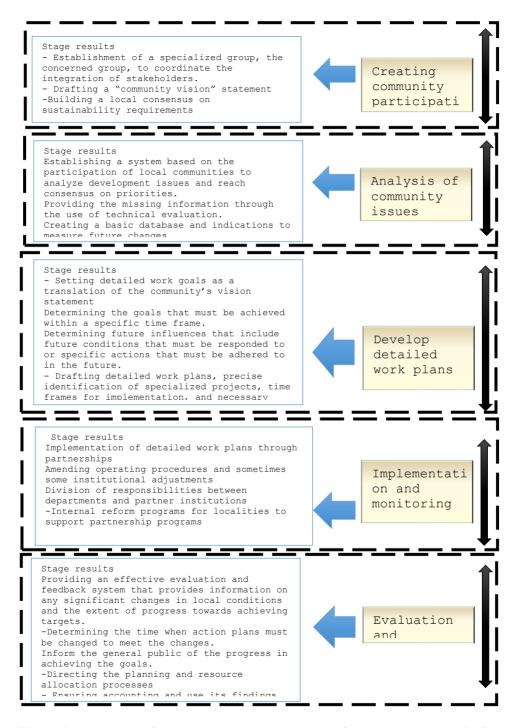


Figure 7. Analysis of the input to the planning guide for the local agenda 21 for the management of the urban environment, showing the results of each stage



6.3 Analytical comparison between the urban environment management and planning approach and the local agenda entry 21:

Conducting a comparative analysis between the urban environment management approach and the local agenda entry 21 (LA21). This analysis includes a comparison between the two approaches through three main aspects.

- The basic dimensions of the sustainability of the system (the political/administrative/institutional dimension).
- The different strengths of each of the two approaches.
- Different stages of implementation of the curriculum.

6.3.1 First, analysis of the key dimensions of system sustainability:

The first aspect of comparative analysis concerns the extent to which the approach achieves the basic dimensions of system sustainability (political/administrative/institutional) presented and analysed in the previous section.

A. Criteria related to the political dimension of a system of sustainable management of the urban environment, including:

- a. Inclusion of the concerned authorities.
- b. Political commitment and agreement between the concerned authorities.

B. Criteria relating to the administrative dimension of the sustainable management of the urban environment, including:

- a. Analysing critical issues of the urban environment and prioritizing.
- b. Organizing and presenting information.
- c. Setting goals and strategies.
- d. Develop detailed work plans.
- e. Dealing with the issues of the urban environment.

C. Criteria relating to the institutional dimension of the sustainable management of the urban environment, including

- a. Develop the organizational/functional structure.
- b. Coordination of the implementation of detailed work plans.
- c. Reciprocal relations across development sectors
- d. Follow-up and regular feeding

The local agenda Approach for managing Urban	Environmental management and planning Approach	
Formation of a partnership in the form of a group with a specialized organizational	Participation among stakeholders and the formation of a team concerned with	Inclusion of
Issuance of a "community vision" statement by consensus of stakeholders	Reaching a consensus of stakeholders and a broad political commitment	Agreement among stakeholder
Analysis and prioritization through participation and extensive data collection for data	Analysis and prioritization through participation and extensive data collection for	Analysis of developme ntal issues
Create a basic database and indicators to measure future	Prepare a formal document for recording and displaying data "Environmental Perspective"	Organizing and displaying
Defining long-term goals that illustrate the environmental perspective, developing an integrated strategy for the urban environment, and determining the required development	Defining long-term goals that illustrate the environmental perspective, developing an integrated strategy for urban environment	Setting goals and strategies
Obligations are set to achieve targets and predetermined influences. Determine time frames for implementation and allocate funds time and human	Setting medium and short-term goals Preparing immediate work plans for each sector, ensuring integration and coordination of plans, and setting details of institutional development	Develop detailed work plans
The future of society as an integrated whole is considered and the development services are determined	Dealing with the issues of the urban environment as an integrated whole and not as	Handling environme ntal issues
A proposal to establish a specialized institution coordinating the implementation of immediate	Coordinate Executive working groups	Coordinati on of detailed
The previously established institution is responsible for solving any problems related to coordination among the different	Relationships among different sectors through the pre- established integrated strategy	Interrelatio nships across
Occasional Development is done at the beginning and during implementation, according to any	Diagnose the institutional aspects and develop an integrated plan for the	institutional development
Providing an effective system for evaluation and feedback, and informing the public of the extent	Relationships among different sectors are coordinated through the pre-established integrated	Follow up and feedback

Figure 8. A comparative analysis between the two approaches regarding the basic dimensions of the sustainable management system



6.3.2 Second: Analysis of the force elements

- Urban Environment Management (BEMA) Strengths Components

- Issuing an official document that includes all the issues of the built environment and their priorities, which is considered as a reference document
- Identifying the weaknesses of the institutional structure at the stage of business plans.

- Strengths of Local Agenda Approach (LA21)

- Forming a partnership from the outset that includes all stakeholders in an organized and codified structure that ensures their commitment.
- Proposing the establishment of an independent institution whose task is to coordinate the implementation of work plans.

- Common strengths of the two approaches

- Inclusion and involvement of all stakeholders from the start of planning.
- Dealing with the issues of the urban environment as an integrated whole and not as separate issues.
- Focusing on the importance of having reciprocal relations across development sectors.
- Establishing mechanisms for follow-up, evaluation and feedback within the urban environment management system.

6.3.3 Third: Analysis of the different stages of implementation of the curriculum

- Environmental Planning Management (EPM) curriculum stages:

- The stage of developing strategies for the urban environment.
- The follow-up and consolidation phase, which includes two responsibilities together, namely implementation and institutional development.

- Local Agenda Approach (21

- The stage of forming partnerships in an organized and codified structure that ensures the commitment of stakeholders.
- Implementation and monitoring phase

• Monitoring and Evaluation Phase

- Common stages of the two approaches

- The stage of analysing societal issues and setting priorities.
- The stage of developing detailed work plans.

6.4 Deriving sustainable management standards and measurement mechanisms

It is the basis for developing policies and preparing plans for achieving quality of life goals, a way to measure the vitality of society, and a statement of management guidance, by seeing the indicators separate gives us information on partial issues in the life of society, it's a way to improve the quality of life for all citizens, In other words, a scale that summarizes information about a particular phenomenon or problem, and provides quantitative or qualitative information that helps determine sustainable development priorities [14].

Table 1: Measurement indicators of progress towards sustainable management:

Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
Determining the concerned parties accurately. The existence of an organized and codified structure for partnerships. Determining the tasks and responsibilities between the local and central agencies without overlapping those roles and responsibilities among them, and using community participation.	Inclusion of stakeholders.	Political
Consensus on the work program (the community's vision). Supporting and implementing the policy of administrative decentralization in the management of facilities and services.	Agreement between those involved	



sustainable management standards - Analysis and prioritization through participation Extensive collection to complete the data. Issuing an official document monitoring the issues of the built environment (environmental perspective). Arranging issues in the form of priorities. Introducing an ambitious and integrated strategic vision Consensus in setting goals to improve the quality of the built environment. Identification of measurable targets and expected future impacts - Setting medium and short-term goals - Setting separate action plans for each of the development sectors, but they are integrated within the framework of the specific goals. Determining the details of the built environment as an integrated whole and not as separate issues - Assessing the environmental impact of building design - Determining the required	36 3 4 0		D 1
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development services.			
		Constitute in the	
Create a specialized Coordinate implementation			T 191 19 7
coordination department in each of detailed work plans Institutional		of detailed work plans	Institutional
city whose primary task is to			
coordinate the actions of the			
detailed work plans from the			
beginning of planning to			
implementation.	implementation.		

Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
- Determining society's annual needs for housing units and public services and studying the population growth rate. Determine the extent to which those needs are met and the percentage of deficit in them.		
How easy the interrelationship is across the development sectors Harmony in mutual relations across the development sectors The ability to integrate reciprocal relationships during integrated strategy	Mutual relations across development sectors	
Creating new executive structures and developing administrative systems. Monitor activities and extent of changes and development as needed.	Organizational development (organizational/functional structure))	
- Setting clear and measurable bases for evaluation - The availability of feedback mechanisms and their integration within the system Extent of implementation of the proposed program for institutional development - Conducting a periodic evaluation of the efficiency of performance Announcing the extent to which goals have been achieved	Monitoring, evaluation and feedback.	



7 Proposed Mechanism for Sustainable Management of New Cities

The model incorporates the basic dimensions of sustainable management, the different strengths and stages that have emerged in each approach to an effective approach to sustainable management in new cities in response to sustainable development targets, and is based on sustainable management standards and measurement mechanisms.

The proposed mechanism for the sustainable management of the urban environment of the new cities is presented and illustrated in different phases

- Phase I: Formation of community participation

The parties involved will be carefully identified and then a partnership will be formed between all of them in the form of a structured and codified structure to ensure the commitment of all concerned.

- Phase II: Analysis of built environment issues

This phase includes the analysis of the built environment issues as a whole and the identification of priority issues, and also includes the issuance of an official document containing prioritized monitoring of the urban environment issues, which will serve as a reference document in terms of the contents and presentation of the issues.

- Phase III: Development of an integrated urban environment management strategy

The partnership structure sets goals for improving the quality of the urban environment on the consensus of all stakeholders. The objectives at this stage are long-term objectives that translate into those monitored in the reference document, and include the identification of future objectives and impacts and the institutional development required to achieve the objective.

- Phase IV: development of detailed work plans

The phase includes all sectors of development in response to the long-term goals previously set; It also includes the development of a detailed integrated programmed of institutional development for all sectors, as well as the establishment of a specialized coordination unit whose primary function would be to coordinate the detailed work plans from planning to implementation processes.

- Phase V: Implementation, monitoring and follow-up

This phase includes the implementation and monitoring of all the work developed during the detailed action plan phase.

- Phase VI: Institutional Evaluation and Development

Evaluation and feedback mechanisms are being established and integrated into the BME to take advantage of any.

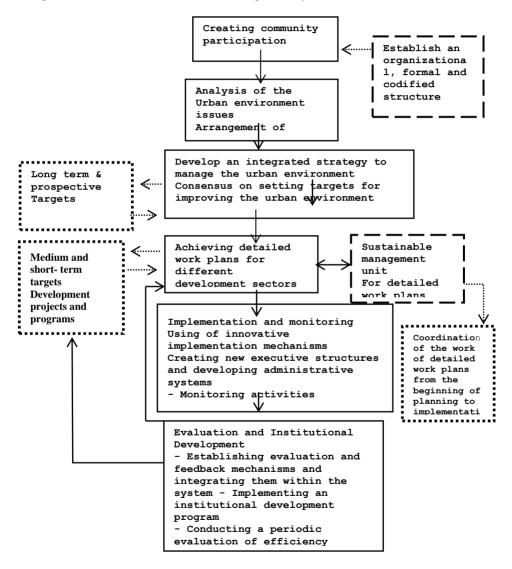


Figure 9. The proposed mechanism for the sustainable management of the urban environment in new cities



8 Analysing a successful global experiment and distilling the foundations for sustainable

8.1 The British Experiment

Britain is one of the most important pioneering countries in the field of the construction of new cities, and this experience has been unique in several distinctive features that make it an important experiment for study and analysis, and many interested people believe that Egypt and Britain have many similarities in nature and administrative aspects, as well as many control systems in urban development and licensing systems for building and construction. Egypt and Britain also share that it is an urban distance rather than an area, as the population growth of Egypt centred only in the Nile Valley and Delta, as opposed to an extension of the river with the longitudinal shape of the British Isles.

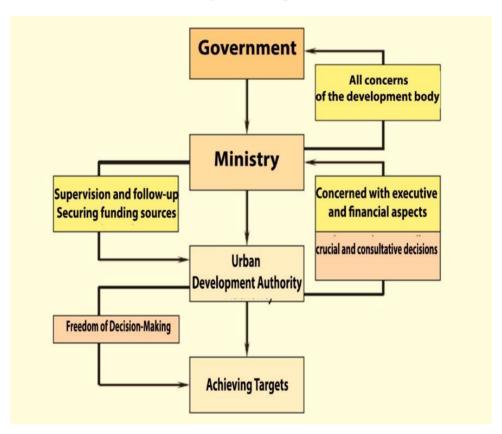


Figure 10. The hierarchy of responsibilities and oversight among the various state agencies

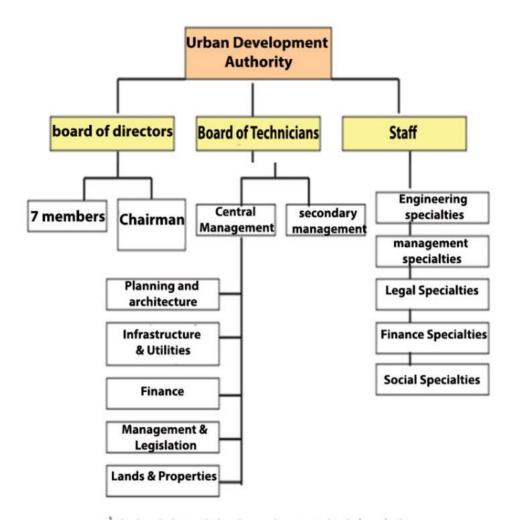


Figure 11. The Administrative Structure of the Urban Development Authority in the United Kingdom

8.2 British Urban Policy Features

England's urban policy has been to create an overall development plan and has made a set of recommendations, the most important of which are:

- a. Limit the establishment of more industries within London or surrounding areas.
- b. Legislation to limit the growth of industrial employment within the city of London.



- c. The establishment of industrial activities outside London is encouraged.
- d. Establishment of a planning authority for the service of the London Territory.
- e. Maintain the rural character of the green belt around London, keep it free of industrial development and keep it from recreational use, while putting in place mechanisms to control the urban and population growth of the towns and villages adjacent to the belt.
- f. A portion of the population of London will be settled outside the green belt in urban agglomerations as new cities to reduce the population density within London.
- g. Creating a balance between people and jobs by spreading the population outside the bustling area to eight new cities around the city of London.

The role of the urban policies of the Government of England in the success of the experiment and the achievement of its objectives:

- a. The British Government has set up a city agency, each with a specific financial and administrative system tasked with obtaining land for city development, planning, implementation and followup.
- b. The government provided integrated services and land for industry construction and workers' housing in these new cities, and the spread of industry created professional and economic employment and created social groups with the different levels of income required within a city.
- c. The ability of the government to control and coordinate all sectors operating in cities.
- d. Being able to review and adjust theoretical ideas if they fail to fit new variables and to the overall project objectives.

The British government has been able to build on previous experiences by establishing 21 new cities in three successive periods of time as strategies and policies for the development of new cities have evolved, as evidenced by increasing target populations from generation to generation and differing city types, size and goals.

8.3 Method of managing urban development in British cities:

a. The UDA is chosen by the Ministry of Housing and the local government, and the city agency is representative of the ministry in achieving development goals.

- b. The Ministry oversees the CDA and approves planning and development proposals.
- c. The Ministry secures private sources of finance for the city through the general state budget.
- d. ADA is responsible to the ministry in its operational and financial aspects.
- e. The ministry is responsible to the government in everything regarding the responsibilities of the development agency, that is, the inclusion of responsibilities and supervision between the various state agencies.
- f. Grants ADA the freedom to make decisions while referring to the Ministry for advice on critical decisions.

Funding

Funding shall be provided through:

- Municipalities: Investments are provided through local taxes and profits from selling land.
- Central government: At a low rate (non-repayable and facilitated loans)
- New City Development Agencies: Infrastructure Finance Onlyprivate sector

Achievements:

Twenty-one new cities have been created over three successive generations in different parts of England, Wales and Ireland and eight cities around Greater London region in a period of no more than 25 years

8.4 ADA governance structure

UK Urban Development Agency consists of:

- Head of the agency
- Seven members from various fields and activities were appointed by the relevant minister and some of them are members of local councils, and they have the responsibility to formulate, follow up, implement and finance the political decisions set.

- First: The functions of the Urban City Development Authority

The Development Agency is responsible for:



- Disbursement from project funds
- Designing an overall plan for the area designated for development operations or new cities in conjunction with officials from relevant ministries, government departments and local authorities.
- Developing detailed plans (in the case of new cities) and send them to the competent minister for approval after discussion with local planning authorities.
- Attempting to introduce the private and public sector to establish various facilities and services that achieve development processes.
- Conducting social research and supervising projects for community development.

- Second: The characteristics of the urban development system

- A small number of members is more accurate in reaching decisions that are approved by all members. -
- The executive organs of the Development Authority are distinguished by the separation of different disciplines.-
- It has the right to review and amend policies, theories and laws if they prove to be inadequate or useless in achieving the required development.
- The development agency is characterized by trying to attract the private sector, localities and cooperatives in addition to the central government in financing and planning for urban development.
- City agencies are characterized by economic autonomy through financing on facilitated loans and some non-refunded government grants. This is an application of local governance.

8.5 Features of the style of public administration in new British cities

- a. Central government control of housing, traffic laws, and public transportation
- b. Give the local authority for new city development the overall authority for the implementation and development of the new city (centralized planning and decentralized implementation).
- c. The clear gradation of responsibilities and competencies between the various state agencies.
- d. Grant the new CDA broad powers to perform its mandated tasks without reference to higher jurisdictions except for critical decisions.
- e. The UK is a leading entity in the use of quality life indicators at the official level and considers them one of the policy development tools at the national, regional and local levels, the UK's experiment in developing and using quality life indicators is important in

sustainable development strategies globally, according to the researcher (this should be adapted to the new Egyptian cities to preserve the gains and avoid the deterioration of life).

8.6 Evaluate the success of the New British Cities Experience

By assessing the success of the management of the new cities:

A. Population standards

- New British cities and communities have achieved 90% of their target population within a period of no more than 25 years from their inception.
- Reducing the population of New London to 8.25 million.

B. Economic Standards

The diversified industrial base was provided, thus providing sufficient job opportunities for the population, as about 40,000 jobs were moved outside London, representing about 3.5% of the workforce in the central region. The policy has moved about 140000 additional jobs through:

- Developing a regional policy for the distribution of employment opportunities that takes into account the population and housing aspects.
- Dispersal of public services by localizing extensions of government departments outside the capital.
- They are interested in motivational aspects to motivate business owners to transfer their activities.

C. Service and facility standards:

Services and facilities were provided in the new cities at prices much lower than the capital to stimulate the population

D. Institutional Framework Standards

The new CDA was enabled to fulfil its obligations by giving it a great deal of decision-making freedom and to refer to the ministry for consultancy regarding crucial decisions.

E. Schematic Standards



The new towns are 32-50 km from the centre of London and are economically and socially self-sufficient.

The best use of communication lines, including highways and railways, thanks to the availability of multiple means of transportation connecting existing cities with new cities, as well as the internal transportation network of new cities.

F. Administrative standards

Attempt to attract the private sector, localities and cooperatives continues at the beginnings of the development of new cities to contribute to the finance, organization and planning process.

G. Stimuli

- Attractions have been created in new cities to encourage employers to move their businesses:
- Providing office buildings that meet all business requirements at a lower cost than in London.
- Reducing tax rates and service rates in new cities than in the capital.
- Providing flat rents for less than half the price of those in the capital.
- Prices reduced for phone calls between London and its new cities, converging local prices
- The new cities are connected to London by an advanced network of regional roads and railways with an interest in the ease of access from the new cities to international airports.
- A range of regulations and legislation have been added to contribute to the further development of new cities, such as the law not allowing new industries to be established in London to limit employment growth.

8.7 The most important lessons learned from Britain's experiment:

- a. The selection of locations for new cities near existing cities so that the existing city gives the first boost to the new city on the one hand with services or infrastructure.
- b. Respect and maintain the importance of the green belt around London so cities were chosen at distances starting after the boundaries of the green belt, in an effort to ensure that there is no future docking between the new society and the crowded capital.
- c. Generally, respect the laws since no city has the potential for industrial or residential expansion at the expense of the green belt

- d. The importance of taking into account the environmental dimension of the blueprint and the ruling ideology of the State, which is shown by respecting the size of the green belt and ensuring that it remains intact.
- e. Attracting industries to new cities by providing large areas equipped with infrastructure and services and connected at the same time to other cities through transportation and road networks, while stopping and freezing any industrial extension in the heart of the capital (London).
- f. The government was able to control the price of the land by obtaining it for public use and then fixing its price as undeveloped land.
- g. Advantages for new cities whether they lower the price of services (communications---) or providing large, well-infrastructure-supported land areas as incentives to attract.
- h. One of the main factors for the overall success of the British experiment is the centralization of planning and the decentralization of management and implementation in the urban community
- i. Together with the government, the scheme has been successful in creating compatible economic service, and legal conditions that help achieve its goals.

By assessing the success of the British experiment in establishing new cities, the experiment proved to achieve its goal of having a full population in the set period and improving the quality of their lives.

9 Studying the 10th of Ramadan as one of the new Egyptian cities

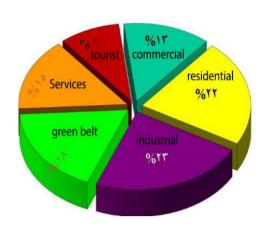
The 10th of Ramadan City is the first of the new cities and the first urban industrial castles characterized by its intermediate location for important ports in Egypt, established by Decree No. 249 of 1977, amended by Republican Decree No. 567 of 1980 to ease population pressure on the capital and urban areas and create job opportunities for young people.

9.1 City Strategy

The administrative area is (19.10 x 20.85) km, equivalent to 398 km2, about 95 thousand Feddan. The strategic plan of the city was designed to keep pace with future expansions to accommodate 2.1 million people when the city was completed, instead of 530 thousand people. The current population reached 650 thousand people, which is 95% of the plan for 2017.







- a. Master plan of the city
- b. City Land use budget

Figure 12. Master plan of the city showing the percentages of land use

9.2 Limitations and Possibilities for the City



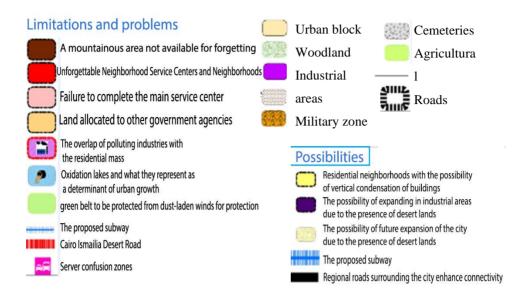


Figure 13. 10t of Ramadan city master plan analysis

9.3 Measuring the extent to which sustainable management is achieved in Tenth of Ramadan City

Table 2. Criteria and measurement mechanisms for sustainable management.

Non- existing	Existing	Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
√	$\sqrt{}$	- The presence of a partnership in the form of a group with a specialized organizational structure - Issuance of a statement of the "society vision" through the consensus of those	-Defining an organizational and formal structure that is codified with community participation	Administrative



Non- existing	Existing	Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
		concerned with urban issues		
√ √ √ √		-Adopting the principles of sustainability and preserving natural resources through the efficient use of technology -Monitoring the extent of community participation in setting priorities - How much interest is in completing the data.	-Analyse critical issues of the built environment and prioritize	
V	V	-Availability of a basic database -indicators to measure future changes	- Organizing and displaying information	
$\sqrt{}$		An ambitious, integrated strategic vision	Establishing goals and strategies	
	√ √ √	Proportion of cultivated land to total areaUrbanization by the calculation of area	-Development of detailed work plans	

Non- existing	Existing	Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
		- Urbanization calculates the area of urban areas (human settlements) - Desertification Proportion of desert land to total area		
√		- Taking into account environmental considerations in city planning, relying on clean energy sources and reducing the use of conventional energy, thus reducing carbon emissions - Evaluate the environmental impact of building design and require building designs to receive LEED certification to comply with the concepts of green architecture and building energy efficiency	-Dealing with the issues of the built environment as an integrated whole and not as separate issues	



Non- existing	Existing	Mechanisms for measuring	Criteria for sustainable management	Dimensions
		sustainable management standards	J	
		- Reliance on the organizational structure and not individuals (outside the structure)) - Based on expert consultation - Permanent Training Module available - Decentralization - Comply with the Description Card for different functions to determine responsibilities	Development of organizational/functional structure	Institutional
	√	- The extent to which open areas and public Spaces containing various activities are provided and serviced for the social integration of individuals.	Coordinate implementation of detailed work plans	tional
	√	- To determine the annual needs of society for housing units, to study the rate of population growth, and to determine the extent to which those needs are	Population plan	

Non- existing	Existing	Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
		met and the proportion of the deficit in housing provision.		
	\ \ \ \ \ \ \	- Reliance on public transportation for traffic flow and safety Provides efficient and private traffic paths for bicycles and pedestrians Availability of the main road network and inland streets Attention to health services at rates appropriate to the population and at an appropriate level Providing educational services to members of society and determining the illiteracy rate and the rate of development of adult learners; - The provision of commercial and cultural services	Inclusiveness of overall planning	



Non- existing	Existing	Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
		represented in cultural and cultural centres.		
√ √	√	- Determination of the proportion of the population classified according to income below the poverty lineDetermination of the unemployment rate in the total population of working age Identify areas without basic services and their population.	Focus on the importance of having reciprocal relations across development sectors	
√ √	√	-The extent to which jobs are created and unemployment reduced Average annual per capita income	Increased economic activities, job creation and social self-reliance	

Non- existing	Existing	Mechanisms for measuring sustainable management standards	Criteria for sustainable management	Dimensions
		and rate of development Ratio of external debt to GDP -Relationship of production and income to consumption resulting from external import.		
		-Evaluation and feedback mechanisms available and integrated within the systems -Extent of implementation of the proposed institutional development programs - Periodic Performance Competency Assessment	Institutional Assessment and Development	



Non-	Existing	Mechanisms for	Criteria for sustainable	Dimensions
existing	8	measuring	management	
Ü		sustainable	S	
		management		
		standards		
		-To effectively	Efficient political	
$\sqrt{}$		manage as the	management and an	
		governing and	ambitious, integrated	
		supporting	strategic vision for the	
		component for	implementation of	
		achieving	sustainable governance	
	$\sqrt{}$	sustainable	concepts through the	
		development	tolerance of the system of	
$\sqrt{}$		goals.	good governance	
		- Support and		
$\sqrt{}$		implement a policy		
		of administrative		
		decentralization in		
		the management of		
		facilities and		
		services in order to		
		improve the level		Pol
		of services in		Political
		urban settlements.		cal
		-Introducing a		
		system to assess		
		and evaluate the		
		environmental		
		impact of		
		development		
		projects.		
		- Identify tasks and		
		responsibilities		
		between local and		
		central agencies		
		without		
		overlapping those		
		roles and		
		responsibilities		
		among them.		

Table 3. Number of Standards achieved/ un met in tenth of Ramadan city

Total number of sub criteria	40
The number of standards achieved in the city	13
The number of unmet standards in the city	40-13 = 27

Thus, the percentage of standards achieved in the city of the tenth of Ramadan is $(13/40) \times 100 = 32.5\%$

By applying the proposed mechanism in the research, the percentage of achieved criteria will be raised as follows:

A. Forming an intermediate management whose structure is shown in Figure 15.

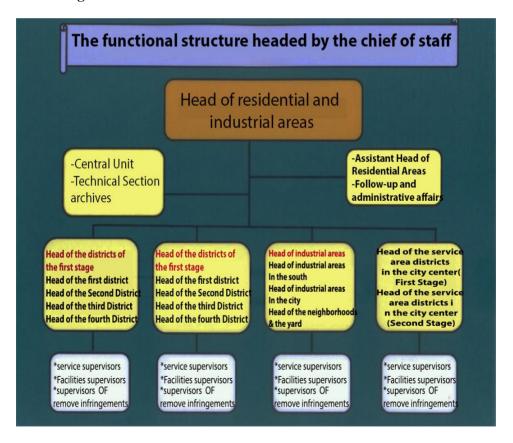


Figure 14. Suggested Job Structure for Intermediate Administration (Neighbourhood Presidency)



B. Apply the attributes resulting from the study to the mechanism of neighbourhood headed action in new cities

Table 4. A daily follow-up report on the development performance in the neighbourhoods from $\ /\ /20$ to $\ /\ /20$

	Assessment of the Basic Service State							Evaluation of developmental performance (percentage-number)														
Notes		as					airs	nents	Gua	ard	Ligh	ting		etho (au		re	ricul auto		Clo	eanli ss	ne	Weekdavs
oN	Transport	Cooker & Ga	Bread	Electricity	Drainage	Water	Environmental Affairs	Removal of infringements	Reconstruction		Arames	pharaohs				Water & Hoe	pruning trees	Care	Infromaster	Europe	Housing	Weel
																						Sat
																						Sun
																						Mon
																						Tues
																						Wed
																						Thu
																						Fri

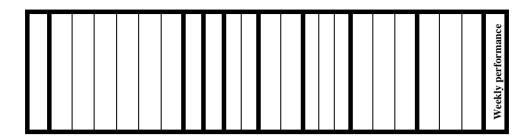


Table 5. A monthly follow-up report on the development performance and the main services in the neighbourhood period from $\ /\ /20$ to $\ /\ /20$

ns					of t ervi Sta	ice	F	Eval	luati			lopn age-				orm	anc	e	
mendatio		as					airs	violations	Guard	Lig g	htin	ethods uto)		ricu auto		Cle	eanli ss	ne	Stage and
Notes& Recommendations	Transport	Cooker & Gas	Bread	Electricity	Drainage	Wafer	Environmental Affairs	Removal of infringements violations	Reconstruction	Aramis	Pharaohs		Water & Hoe	Pruning trees	Care	Infromaster	Europe	Housing	area
																			First Stage
																			Seco nd Stage
																			City Centr e
																			Indus trial Areas
																			Farm yard
																			Monthl y Perfor mance



Observations, suggestions, and necessary needs for the development of performance and the main services in residential neighbourhoods for a month in the city of First: development performance Clean-up work: First and Second Neighborhoods - Company Performance percentage (%) Third and Fourth Neighborhood Company Performance percentage (%) Fifth and Sixth Neighborhood Company Performance percentage (%) Seventh and Eighth District Company Performance percentage (%) Service areas Company Performance ratio (%) **Agriculture:** First and Second Neighborhoods - Company Performance percentage (%) Third and Fourth Neighborhood Company Performance percentage (%) Fifth and Sixth Neighborhood Company Performance percentage (%) Seventh and Eighth District Company Performance percentage (%) Service areas Company Performance ratio (%) - 5**Road maintenance work:** First and Second Neighborhoods - Company Performance percentage (%) Third and Fourth Neighborhood Company Performance percentage (%) Seventh and Eighth District Company Performance percentage (%) Seventh and Eighth District Company Performance percentage (%) Service areas Company Performance ratio

(%) - 5

Lighting and electrical work

Second: Main services:

Water and sanitation

First and Second Neighborhoods - Company Perfo	ormance
percentage (%)	
Third and Fourth Neighborhood Company Perfo	rmance
percentage (%)	
Seventh and Eighth District Company Perfo	ormance
percentage (%)	
Seventh and Eighth District Company Perfo	rmance
percentage (%)	
Service areas Company Performan	ce ratio
(%)	

Infringements and irregularities

Number of notices of removal

Number of removals

Environmental Affairs:

Performance of spraying resistance of flying insects in summer ()- winter () and area () is neglected $\frac{1}{2}$

Disposal rate of stray dogs and area is neglected. By applying this, nineteen other criteria are achieved, bringing the total achieved to 32 criteria, which means that the percentage of achieving sustainable management in the new Egyptian cities will rise to

32 /40 x 100 = 80%



By achieving progress in the political dimension, we will reach the achievement of sustainable management standards in the new Egyptian cities.

9.4 The improvement plan for the proposed model for sustainable management

The proposed model consists of six consecutive phases proposed by research for sustainable management of the built environment, the results of which are arranged in such a way that the starting point for the subsequent phase includes:

- The establishment of a sustainable management unit in charge of managing the urban environment of the new Egyptian cities, in development of the agency's sustainable development unit.
- Built environment issues analysis phase
- Development phase of an integrated urban environment strategy
- Detailed blueprint development phase
- Implementation, monitoring and follow-up phase-
- Assessment and Feedback Phase

The main objective of this phase is to build and develop the capacity of new city administrations to implement the previous six phases, as local capacities are currently not able to assume this responsibility.

This phase of development consists of four development directions that the research suggests should be carried out in parallel with all phases of the proposed model. These development trends include:

- Direction of organizational structure development-
- Direction to develop financing mechanisms
- Direction of management capacity development
- Direction of developing legislative mechanisms-

It should be noted that the proposed model does not address the political dimension of the system for the sustainable management of the urban environment since it is far from the physical domain of research and management mechanisms used in implementation that achieve the administrative dimension of system sustainability.

The proposed model focuses primarily on institutional development procedures that realize the institutional dimension of the sustainable management of the new Egyptian cities, where the analysis shows that most of the constraints were related to the institutional aspect of the system and that the development of this aspect would yield significant benefits for the sustainability of the management system as a whole.

- Phase I: Detailed Analysis of New Egyptian Cities Sustainable Management Model

Development of the Sustainable Development Unit headed by UN-Women as a sustainable management unit. The objective of this phase would be to guide and coordinate the various development sectors in the new cities in order to improve their lives and ensure complementarity between the detailed action plans of the development sectors. It would be in direct contact with the district headquarters in all new cities, expressing its reality among decision makers in the parent body, supporting immediate solutions to any interference at higher levels and supporting the authority of the city authority through direct contact with the middle levels of administration. At the testing stage of the proposed framework, there were many opinions suggesting developing an existing unit rather than creating a new one

- Phase II: Analysis of built environment issues

This phase aims to analyse urban environment issues as a whole and identify priority issues. The new unit responsible for the management of the built environment begins by helping the district headquarters of the various agencies to identify the beneficiaries well and then organizing public workshops, conferences or consultation workshops involving all parties in order to reach a general consensus among them on the priority issues. It also includes the issuance of an official document that includes built environment issues and their prioritization.

- Phase III: Development of an integrated urban environment strategy

The main objective of this Phase is to establish long-term objectives. The Sustainable Management Unit formed at an earlier stage in charge of managing the urban environment develops objectives for improving the quality of the built environment based on the previous consensus of all stakeholders.

- Phase IV: Develop detailed Work Diagrams

The main objective of this phase is to set medium - and short-term goals, on the basis of which separate detailed action plans are drawn up for each development sector, to be developed by different local administrations, while the sustainable management unit in charge of the management of the urban environment has the major burden of following the coordination of these detailed actions with the different district heads of each city to ensure their integration within the framework of the previously established long-term goals.

- Phase V: Implementation and Monitoring



The objective of the stage: This stage aims to implement and monitor all the works that were developed during the detailed work plans stage

- Phase VI: Assessment and feedback

This phase aims to establish evaluation and feedback mechanisms and integrate them within the Urban Environment Management System through legislative foundations established for monitoring and evaluation during the procedures for developing legislative mechanisms. It is also intended to take maximum advantage of any problems or errors encountered during the implementation process and therefore revert to any stage and make adjustments.

The main objective is to verify the effectiveness of the model and to develop some of its points and provisions. It has been carried out using a specific methodology, such as:

- a. The detailed analysis of the proposed Sustainable Urban Environment
 Management model (noted by the researcher) should be taken as a
 - Management model (noted by the researcher) should be taken as a guideline.
- b. The researcher will track and determine the actions taken in the Egyptian experiments at each stage of the implementation of the system and the associated tasks and responsibilities, and compare them with the actions proposed at each stage of the model.
- c. A number of interviews with a group of experts in different thematic areas, which can be broken down as follows:
 - Egyptian experimenters (such as planners)
 New Cities Development Experts (such as investors)
 - Academic research and teaching experts at universities
 - Experts from central government (headed by NUCA)
 - Experts working for new city agencies
- d. Making any amendments to the various items of the proposed model based on the constructive views of experts

- Results of testing of the proposed framework

In the process of testing the proposed model, it was observed that differences of opinion emerged between the experts consulted depending on their respective disciplines. The academic experts focused on the sequence of the proposed phases of the framework and their relationships to each other, while the experts from the city agencies focused on the details of the government role in the proposed model. On the other hand, the experts from the staff headed by the agency focused on the overall view of the proposed model and the integrated system it presented, Finally, expert practitioners from mid-level agencies focused on the details of the different tasks within each phase, the interrelationship between the

role of government workers, and the location of community participation in the proposed model, citing the success of city (Modernity) management.

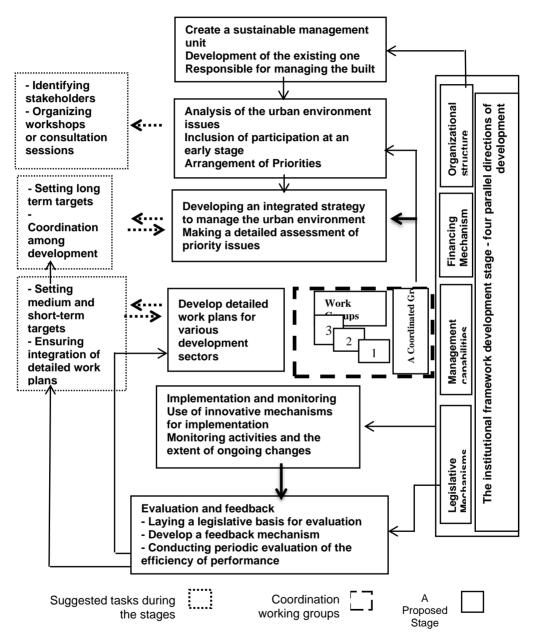


Figure 15. A mechanism that implements sustainable management in the new Egyptian cities



10 Main Findings

First: The main findings gathered by a number of experts include the following:

a. Regarding the Working Group Proposal:

By aggregating the different opinions of the experts, the researcher found that there was a general consensus on the importance of using a working group mechanism that addressed different development issues. Most of them also agreed that experiments that did not use this mechanism had many problems. On the other hand, experts disagreed on when the working groups should be formed, so three alternatives to the timing of the working group formation have emerged, including:

- b. The working groups should be formed from the outset of the development of the integrated system for sustainable urban environment management so that the members of these groups are aware of the system as a whole
- c. Working groups are formed from the beginning of the development of detailed work plans so that their members participate in the preparation of these plans and are aware of the details to assist in their implementation.
- d. Working groups should be formed only at the start of implementation, as their primary role is to coordinate the implementation of detailed work plans.

Second: With regard to the proposal to develop the Sustainable Development Unit as a sustainable management unit:

Most experts approved off the importance of having a coordinated unit responsible for an integrated system for sustainable management of the urban environment and that most of the problems facing the management of the built environment lay in the lack of an agreed unit playing a strategic and coordinating role. There was the idea of creating an entirely new body. Experts stated that the proposal for a new body had already been put forward in real Egyptian experiences and its implementation faced many obstacles such as lack of funding, crashing with red light and government bureaucracy or lack of willingness to change. On the basis of the above-mentioned suggestions and the consensus of different views, three suggested trends emerged for the organizational structure of the unit responsible for managing the urban environment:

• The First Attitude: Establishment of an institutional body with a completely new structure

- The Second Attitude: is to develop the organizational structure of an already existing body.
- The Third Attitude: creating an intermediate unit.

The following is an explanation of each of these three attitudes

The First Attitude is to establish an institutional body with a completely new structure. This Attitude was presented with tasks and responsibilities explained and was not accepted by most. While, the Second Attitude is to develop the organizational structure of an already existing administration. The already existing Sustainable Development Unit is being developed in charge of the integrated system for the sustainable management of the urban environment in the new cities. The experts interviewed suggested the following points:

- Incorporation of new corporate functions to add to existing ones.
- Train staff in new functions added to their job descriptions.
- Internal rules and internal job descriptions of the existing department may need to be changed.

Finally, the Third Attitude is to create an intermediate management. Some of the experts interviewed put forward a proposal for the establishment of an intermediate department, meaning that a number of workers in different departments and sectors of development are gathered in order to form the members of this department. The main task of these members is to carry out coordination between the different development authorities or sectors to which they belong by virtue of their functions, to conduct all the life affairs of the residents of these cities.

11 Results and Recommendations

A proposed model for the sustainable management of the new Egyptian cities has been developed based on a set of key and sub-criteria consistent with the United Nations indications of sustainable development. It consists of six stages, as follows:

- Phase I: Formation of partnerships (community participation)
- Phase II: Analysis of Urban Environment Issues
- Phase III: Development of an integrated urban environment management strategy
- Phase IV: Development of detailed Work Plans
- Phase V: Implementation and Monitoring
- Phase VI: Institutional Assessment and Development

Despite the differences and specificities in each new Egyptian city, the proposed model can be applied to all new Egyptian cities, as well as the need to



reconsider the powers of the city department in a way that expands the circle of decentralization and allows its leaders to make the right decisions at the right time.

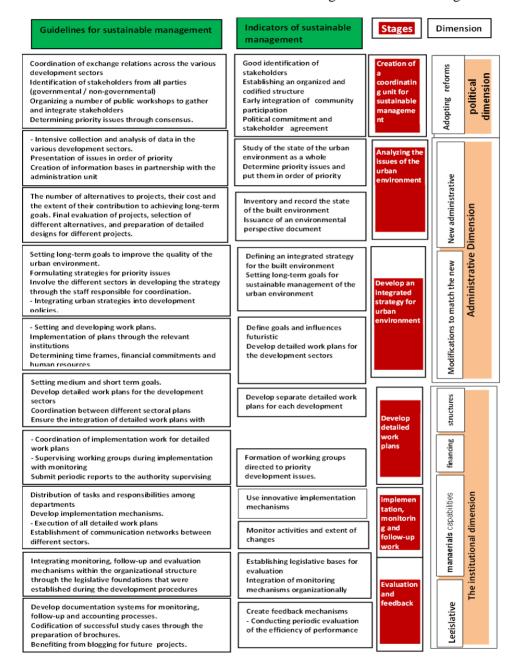


Figure 16. Model of sustainable management of the urban environment in new Egyptian cities

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