



New City Planning Options in light of Sustainable Urban Development Objectives

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Abstract

This study aims to explore new city planning options in the context of sustainable urban development objectives, considering them as a strategic tool for addressing contemporary urban challenges, including rapid population growth, urban expansion, and pressure on natural resources. The study focuses on the problem of achieving a balance between urban development and environmental preservation, as one of the most salient manifestations of imbalance in the spatial and social organisation of cities, and the resulting disparities in access to services and infrastructure. The study concludes that the adoption of sustainable planning options for new cities constitutes an integrated approach that combines environmental, economic, social, and planning dimensions, thereby contributing to an improvement in quality of life, enhancing efficiency in resource use, and ensuring spatial justice. It also highlights the importance of these criteria in achieving comprehensive urban sustainability through urban planning that balances development and social integration, thereby reducing marginalisation and exclusion in the urban space.

Keywords: *new cities, urban planning, development, urban development, environmental and social sustainability.*

Résumé

Cette étude vise à explorer de nouvelles options d'urbanisme dans le contexte des objectifs de développement urbain durable, en les considérant comme un outil stratégique pour relever les défis urbains contemporains, notamment la croissance démographique rapide, l'expansion urbaine et la pression sur les ressources naturelles. L'étude se concentre sur le problème de l'équilibre entre le développement urbain et la préservation de l'environnement, qui est l'une des manifestations les plus saillantes du déséquilibre dans l'organisation spatiale et sociale des villes, et des disparités qui en résultent en matière d'accès aux services et aux infrastructures. L'étude conclut que l'adoption d'options d'aménagement durable pour les nouvelles villes constitue une approche intégrée qui combine les dimensions environnementales, économiques, sociales et d'aménagement, contribuant ainsi à l'amélioration de la qualité de vie, à l'efficacité dans l'utilisation des ressources et à la justice spatiale. Elle souligne également l'importance de ces critères pour parvenir à une durabilité urbaine globale grâce à un aménagement urbain qui équilibre le développement et l'intégration sociale, réduisant ainsi la marginalisation et l'exclusion dans l'espace urbain.

Mots clés : *nouvelles villes, urbanisme, développement, développement urbain, durabilité environnementale et sociale.*



Introduction:

The contemporary world is witnessing rapid urban transformations that reflect the depth of the economic, social, and demographic changes affecting various countries, particularly in the context of increasing population growth rates and internal migration from rural to urban areas, which have resulted in considerable pressure on existing cities in terms of housing, infrastructure, and public services. This has led to the emergence of numerous challenges, such as traffic congestion, environmental pollution, informal urban expansion, and a shortage of land suitable for development. In the face of these transformations, new cities have emerged as strategic solutions to address urban crises and achieve a balanced urban distribution that aligns with the requirements of modern development. New cities are considered among the most important planning tools for restructuring the urban fabric and directing urban growth in an organised manner, ensuring the achievement of spatial justice and the provision of an integrated living environment. However, the success of these cities is not measured solely by their capacity to absorb population or attract investment but rather by the extent to which they conform to the principles of sustainable urban development, which today constitute the overarching framework for any contemporary urban planning that seeks to reconcile economic development, environmental protection, and the realisation of social justice.

The United Nations 2030 Agenda for Sustainable Development has accorded significant importance to the

urban dimension through Goal 11, which stipulates making cities and human settlements inclusive, safe, resilient, and sustainable. This goal represents a fundamental reference point for the planning processes of new cities, as it calls for the adoption of precise standards in their design that ensure efficient resource use, reduction in pollution, provision of adequate housing and sustainable infrastructure, and promotion of social justice and community participation in urban decision-making. From this standpoint, the research problem can be formulated as follows:

To what extent do new city planning options contribute to achieving sustainable urban development objectives?

Based on this problem, a set of hypotheses can be formulated as follows:

1. Adopting new city planning in accordance with sustainable urban development criteria enhances its environmental, economic, and social efficiency, ensuring a balance between present needs and future requirements.
2. The absence of a sustainability perspective in new city planning renders it incapable of confronting climatic, economic, and social challenges. It turns it into an extension of the crises experienced by old cities.
3. Integrating the principles of urban governance and community participation into planning enhances the effectiveness of implementing sustainable development standards in new cities.

The research objectives are as follows:

- To examine the theoretical concept of new city planning criteria and their relationships with sustainable urban development objectives.



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- To identify planning criteria that ensure a balance between economic growth, social justice, and environmental protection in new cities.
- To propose an integrated vision for new city planning on the basis of the principles of efficiency, flexibility, and participation.

To achieve these objectives, the study employs a descriptive-analytical method, which involves analysing theoretical concepts and various planning approaches related to new cities and sustainable development. This approach draws on comparative studies of real-world experiences to derive appropriate lessons and applied criteria. The study also relies on a review of the scientific literature, United Nations reports, and planning documents to clarify the relationship between urban development and sustainability objectives. This review aims to establish a scientific vision that enables the formulation of a practical conception for planning new cities in light of sustainable urban development principles.

1. The conceptual framework of new city planning

1.1. Definition of the new city

Urban planners, in some cases, resort to establishing new cities when the land reserves of existing cities can no longer absorb increasing population growth or when old cities become incapable of accommodating the economic activities and investments directed towards them. This option is also proposed in the context of worsening existing urban problems and the exhaustion of the various means capable of addressing them, as planners consider that continued expansion within the old urban fabric will deepen and

further complicate these problems. The creation of new cities requires substantial material and human resources, as well as a political and strategic decision. In this context, the governmental vision is presented to ministerial councils after a detailed study of the locations, economic costs, and potential impacts on existing cities, with the assistance of experts and specialists in urban planning. A new city is defined as "a city established by political will within specified time periods, in previously uninhabited geographical areas, which, over time, is transformed into a city with fully developed functions and built form, while retaining the designation 'new city' (Mhourbasha, 2018, pp. 103-104).

The new city constitutes a modern urban model established by the state through targeted decisions within the framework of specific planning policies. This model aims to accommodate increasing population growth and provide new employment opportunities while also alleviating demographic and urban pressure on major cities, thereby contributing to the stimulation of economic and social development. The new city is regarded as an advanced form of planning and urban thought adopted by both developed and developing countries to confront escalating urban crises through the creation of new urban centres on the basis of the principle of sustainability and focused on achieving social, economic, and regional balance. These cities aim to redistribute population and economic activities by establishing new poles of urban attraction outside the traditional scope of existing cities, which reduces population congestion and helps direct development towards more balanced urban areas. Accordingly, the new city can be viewed as an integrated system of economic, productive,



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cultural, and administrative relations that constitute a sustainable urban space seeking to achieve integration between human needs, development requirements, and environmental imperatives (Rabah, 2015, p. 168).

1.2. Main objectives of establishing new cities

The objectives of establishing new cities can be summarised in a set of integrated dimensions that reflect the orientation towards achieving comprehensive and balanced development, as follows (Aoufi & Rouabhi, 2019, p. 72):

- **Urban objectives**

The urban objectives of new cities aim to restructure spatial organisation within the state by reducing the excessive concentration of population and activities in major cities, particularly national capitals, which suffer from demographic inflation and unregulated urban congestion, leading to problems in housing, transportation, and public services. The establishment of new cities is considered one of the most important planning tools for achieving a new urban balance, which enables a more equitable distribution of population and economic activities and contributes to alleviating pressure on existing urban centres. These cities also aim to provide adequate and affordable housing for households and improve the quality of urban life through planned urban environments equipped with modern infrastructure and essential facilities, which positively affects the achievement of demographic, social, and economic stability and reduces the phenomenon of informal settlements and unregulated growth.

- **Political objectives:**

The political objectives of new city planning stem from the state's desire to achieve administrative and regional balance among its various areas and to reduce the concentration of power and institutions in capital or old central cities. These objectives are often reflected in the relocation of certain administrative and political functions to new cities or even in the establishment of alternative administrative capitals in locations with favourable natural and strategic characteristics, as seen in some recent international and Arab experiences. This orientation is intended to strengthen national unity and spatial integration, facilitate public administration, and alleviate pressure on traditional political centres that suffer from congestion and disparities in service distribution. Accordingly, new cities play a pivotal role in redistributing power and benefits within the national territory, thereby enhancing geographical justice and territorial cohesion.

- **Environmental objectives:**

Environmental objectives are among the fundamental pillars of new city planning, as they aim to improve the quality of the urban environment by reducing population density in major cities and limiting pollution, noise, and traffic congestion. These cities rely on increasing green spaces and public parks and designating open natural areas that contribute to air purification and the improvement of the local climate. Their planning also takes into account achieving environmental balance through the use of sustainable planning principles, which ensure harmony between human activity and the surrounding natural system. This is achieved by adopting clean energy sources, sound waste and water management, and promoting



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sustainable transport. These practices contribute to creating a built environment that is healthier, more resilient, and more sustainable in the long term.

• **Social objectives:**

The social objectives of new cities seek to achieve social justice and improve the quality of life for residents by providing a balanced living environment that is inclusive of all groups. These objectives include meeting basic needs such as housing, education, health, and transportation while ensuring an equitable distribution of services and facilities. They also aim to reduce class-based and spatial disparities that typically emerge in major cities due to unbalanced growth. New cities strive to build a cohesive society on the basis of social integration and collective belonging by providing spaces for social, cultural, and recreational interactions that strengthen the spirit of citizenship and support the values of solidarity and coexistence. This, in turn, contributes to increasing the level of human well-being and achieving social stability.

• **Economic objectives:**

Economic objectives are among the most prominent drivers behind the establishment of new cities, as they focus on diversifying the national economic base and reducing reliance on major cities as the sole hubs of economic activity. These cities are established to create new spaces for investment and industrial, commercial, and service production, thereby contributing to the creation of diverse employment opportunities and attracting local and foreign capital. They also aim to achieve balanced regional development by distributing economic projects and infrastructure across new areas, which helps reduce

developmental disparities between regions and stimulates local growth. In this sense, new cities serve as a strategic tool for achieving sustainable and inclusive economic growth, thereby enhancing the state's competitiveness and ability to adapt to global economic transformations.

Thus, new cities serve as strategic instruments for achieving integrated development through the redistribution of population and economic activities, the enhancement of the urban environment, and the promotion of social justice, thereby ensuring a more balanced and sustainable urban future.

1.3. The evolution of planning for new cities from the industrial model to the sustainable and innovative model

The planning of new cities has evolved through multiple stages, shifting from the traditional industrial model that prevailed during the eighteenth and nineteenth centuries to the sustainable and innovative model in the contemporary era. Cities emerged and expanded in response to interlinked economic, social, demographic, and political factors, leading to an increasing demand for services and resources and consequently to rapid and unregulated urban expansion. This uncontrolled expansion contributed to a decline in the functional efficiency of the city and a weakening of its capacity to meet residents' needs, thereby disturbing its social and urban balance and generating multiple urban problems, such as overpopulation, environmental degradation, the emergence of informal settlements, and the spread of unemployment, poverty, and crime. The Industrial Revolution constituted a fundamental turning point in urban history, as it resulted in significant urban expansion



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and deterioration in the urban environment and the built fabric of existing cities, which prompted planners to consider new alternatives based on the creation of modern cities and urban agglomerations that take into account the principles of urban and environmental sustainability.

By the mid-twentieth century, particularly after the Second World War, the movement to establish new cities had become a strategic orientation in many developed countries, such as Britain and the United States of America, where planning policies were adopted that focused on the temporal dimension of development and on achieving a balance between the social, economic, and environmental dimensions within the framework of sustainable development objectives. In Britain, for example, the experience of planners Howard and Geddes in establishing independent new cities emerged and was founded on integrated economic and social bases. In this context, 14 new cities were established (10 in England, 4 in Scotland, and 4 in Wales) to achieve administrative and economic independence from their parent cities and create new centres of population and economic attraction. Over time, this experience has extended to other European and American countries, especially after the destruction caused by the Second World War and the pollution resulting from industrial expansion, leading to the emergence of the concept of ecological cities, which seek to reconcile economic development with environmental protection and the improvement of quality of life (Al-Sayyid, 1985, p. 289). Modern planning approaches have focused on three main types of new cities (Al-Dhiba, 2003, p. 249):

- **Independent cities:** These are established at a distance from major urban centres and are characterised by administrative and economic independence. They aim to achieve demographic balance and integrated community development by creating new employment opportunities and attracting populations from densely populated areas.
- **Satellite cities:** These cities are located near major cities and serve to absorb population growth and urban pressure while remaining functionally and economically linked to the parent city.
- **Continuous cities:** These cities are similar to satellite cities in terms of function, but they are directly connected to existing urban cities and constitute a natural extension of them.

These experiences have been clearly reflected in developing countries that have adopted the idea of new cities as a strategic option for solving housing problems and urban congestion, including Algeria, Egypt, Saudi Arabia, and Libya. In Algeria, the policy of creating new cities emerged within the national strategy for spatial planning and sustainable development, as it aims to create new urban poles capable of achieving the geographical balance of the population, stimulating the local economy, and providing organised and sustainable urban spaces that consider environmental and social criteria. Thus, the evolution of planning thought for new cities reflects a fundamental shift from the industrial model, which focuses on production and material expansion, to the sustainable and innovative model, which is based on the integration of human beings, the environment, and technology to achieve cities that are more



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efficient, flexible, and resilient in the face of future challenges.

2. The concept of sustainable urban development and its dimensions

2.1. Definition of sustainable urban development

Al-Samarrai defines sustainable development as a process of “sound management and effective use of natural resources such as soil and water in a way that prevents waste and ensures continuity in investment, with attention to permanent maintenance and the rehabilitation of these resources to guarantee their durability. This process is closely linked to human development in various fields, whether living, health, educational, cultural, or recreational, with the aim of achieving a balance between meeting the needs of current generations and ensuring the rights of future generations. This goal is realised through an organised institutional network that operates within a framework of modern technologies and available economic and technological capacities in a manner consistent with social acceptance and human values” (Al-Samarrai, 2006, p. 9).

Muhammad Abd al-Fattah Muhammad defines sustainable urban development as “a series of processes aimed at mobilising various human and material potentials and capacities to determine paths of progress at both the strategic and technical levels, based on the interaction between energy and function on the one hand and contemporary and pressing forces on the other” (Al-Fattah, 2002, p. 186).

Abd al-Hamid Rashwan further explained that sustainable urban development represents “the process of the emergence and evolution of urban communities and the transformation of rural communities into urban societies through the directed changes experienced by the city in terms of increasing population density, the diversification of nonagricultural economic activities, the development of the division of labour and social relations, as well as the renewal of buildings and the transformation of land-use patterns within a framework of self-organisation that is not based on direct control” (Rashwan, 1991, p. 266).

2.2. Dimensions of sustainable development:

- **Economic dimension:**

The economic dimension is one of the most crucial components of sustainable development, as it seeks to establish a robust and balanced economy that fosters growth and prosperity without compromising resources or harming future generations. This dimension is based on economic reform through the development of financial and productive policies that ensure efficient resource use and reduce the waste of natural resources. It also calls for halting the depletion of natural resources by adopting responsible production and consumption strategies that take environmental protection into account, ensuring the sustainability of resources for future generations. Moreover, economic development is viewed as an opportunity to promote innovation and investment in sectors capable of creating added value and generating employment opportunities, thereby contributing to poverty reduction and improving living standards. This dimension also seeks to reduce the dependence of developing countries on wealthy



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nations by supporting local productive capacities and diversifying income sources, thereby strengthening economic independence and consolidating justice in international economic relations. In this way, the economic dimension constitutes a foundation for achieving comprehensive development that balances economic growth, resource conservation, and social justice (Abu al-Nasr & Muhammad, 2017, pp. 103–104).

• **Social dimension:**

The social dimension is one of the central pillars of sustainable development, as it revolves around the human being as both an end and a means simultaneously. Development is not measured solely by indicators of economic growth or productive efficiency but also by its capacity to enhance individuals' quality of life and ensure justice and equality within society. This dimension aims to build a cohesive society governed by solidarity and social cohesion through the provision of equal opportunities for all in the fields of education, health care, employment, housing, and basic social services in a manner that achieves social justice and reduces poverty and class- and spatial-based disparities. The social dimension is also concerned with empowering vulnerable and marginalised groups, such as women, youth, persons with special needs, and elderly individuals, by integrating them into economic and social life and enabling them to participate effectively in the development process and decision-making. This is considered an essential condition for achieving social stability and for strengthening human and social capital, which is a principal driver of sustainable development. Moreover, this dimension works to consolidate the values of

active citizenship and collective responsibility and to encourage widespread participation in determining development priorities and ensuring justice in the distribution of resources and services. It also aims to foster a culture of peace, tolerance, and respect for cultural and social diversity, thereby promoting harmony within society and mitigating social conflicts. Achieving sustainable development in its social dimension requires comprehensive policies that take human rights into account and place social justice at the core of development strategies, since the human being is not merely a factor in the production process but the primary driver of change and development. Thus, the social dimension constitutes a fundamental basis for building a balanced human society in which individuals enjoy dignity and equality, rights are protected, and every person is enabled to contribute effectively to building a more stable and sustainable future (Kafi, 2017, p. 77).

- **Environmental dimension:**

The environmental dimension is one of the fundamental pillars of sustainable development, as it is closely linked to preserving natural resources and ensuring their optimal use. According to the environmental conception of sustainable development, every natural system has specific environmental limits that must not be exceeded in processes of consumption or depletion because crossing these limits leads to irreversible degradation of the ecosystem. Hence, environmental sustainability entails imposing constraints on patterns of consumption, population growth, pollution, irrational production, water depletion, and deforestation. These issues have become increasingly pressing with the escalation of environmental crises in recent decades, underscoring the urgent need for balanced and responsible



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environmental management (Zarbita & Boughrish, 2022, p. 185).

Hassouna Abd al-Ghani noted that the environmental dimension of sustainable development consists of the sound management of natural resources, which is the backbone of all development efforts. Since the continuation of life on planet Earth depends on the quantity and quality of these resources, environmental depletion constitutes one of the most serious factors hindering sustainable development. This necessitates the development of scientific and methodical approaches for the long-term management of natural resources, ensuring the alleviation of pressures on the ecosystem and achieving a lasting balance between human beings and the environment. Thamer al-Nuwairan also affirms that the environmental dimension of sustainable development is based on protecting the environmental limits of the natural system by safeguarding natural resources from pollution and preventing their depletion, especially nonrenewable ones. This requires the adoption of rational practices in the exploitation of resources to guarantee their continuity for future generations, making the prudent use of natural resources a fundamental condition for achieving sustainable development (Zarbita & Boughrish, 2022, p. 186).

In addition to the three basic dimensions of sustainable development—environmental, economic, and social—a fourth dimension has emerged in recent years: the technological or scientific and technical dimension. This dimension is one of the key driving factors for achieving sustainable development more effectively and efficiently. This dimension seeks to harness modern technology and scientific innovation to reduce excessive consumption of

natural resources, lower emissions and pollution levels, and rely on renewable energy sources as a means of achieving sustainable development without harming the environment. The technological dimension is regarded as one of the main engines for realising the objectives of sustainable development, as it contributes to the transition towards a knowledge-based economy that relies on the use of modern technologies in production and services, thereby helping to achieve a balance between the economic, environmental, and social dimensions of development. This implies a shift from a conception of development based on intensive resource consumption to a form of development grounded in efficiency, innovation, and thoughtful planning. From this standpoint, sustainable development has come to rest on a comprehensive foundation that brings together the requirements of the present and the rights of future generations through sound economic policies, just social practices, and environmentally friendly technologies. Many researchers have indicated that this integration among the four dimensions represents the optimal path to achieve genuine and comprehensive sustainability. Some scholars have also added a fifth dimension, known as the cultural or value dimension, which became clearly apparent from 2005 onwards following the adoption of the concept of sustainable cultural development by numerous international organisations. This dimension emphasises that the preservation of cultural diversity and the strengthening of social values constitute an essential part of the development process, as sustainable urban development cannot be achieved without considering the cultural and social specificities of different societies (Bayazid, 2022, p. 280).



2.3. Linking Sustainable Development Goal 11 with the planning practices of new cities

On 20 September 2010, the United Nations adopted, during its Sustainable Development Summit, a historic document entitled *Transforming Our World: The 2030 Agenda for Sustainable Development*, which represents a comprehensive global framework for achieving balanced and inclusive development among countries. A total of 193 United Nations Member States participated in formulating this agenda under the slogan "leaving no one behind," affirming the universal and equitable nature of the Sustainable Development Goals. The 2030 Agenda comprises seventeen interrelated goals and 199 targets, all of which aim to eradicate poverty and hunger; achieve good health and quality education; ensure gender equality; provide decent work and economic growth; promote innovation, industry, and infrastructure; guarantee the sustainability of natural resources; protect the environment; foster justice and peace; and strengthen global partnerships for development. These goals aim to achieve a balance between the economic, social, and environmental dimensions of development, ensuring the construction of societies capable of addressing future challenges and promoting human well-being worldwide (Bayazid, 2022, p. 275).

Goal 11 of the Sustainable Development Goals is closely linked to the planning practices of new cities, as this goal aims to make cities and human settlements inclusive, safe, resilient, and sustainable. It reflects a comprehensive vision aimed at building cities that simultaneously consider the needs of human beings, the environment, and the economy

by promoting social justice, enhancing quality of life, and ensuring the sustainability of resources for future generations. In this context, cities are considered key hubs of economic, cultural, and scientific growth, as they constitute centres of social mobility and civilisational progress. However, this vital role is accompanied by multiple challenges, including overpopulation, financing deficits, a shortage of adequate housing, and infrastructure deterioration. Hence, urban planning has emerged as a strategic tool for translating sustainable development goals into practical measures that address these challenges and achieve a balance between the requirements of growth and those of sustainable development (Belhouchat, 2024, p. 17). Urban planning for new cities contributes to achieving this goal through a set of integrated practices (Belhouchat, 2024, pp. 20–21):

- **Green energy:** Contemporary planning focuses on integrating renewable energy sources into the structure of new cities by identifying suitable locations for installing solar panels and wind turbines and encouraging the use of clean energy in residential and commercial buildings. The establishment of charging stations for electric vehicles is also promoted to reduce carbon emissions and support the transition to a green economy.
- **Sustainable transport:** Transport constitutes a central axis in sustainable urban planning, where efficient and environmentally friendly public transport systems, such as electric buses and clean trains, are developed, alongside the design of networks that facilitate access to these modes and reduce reliance on private cars. Attention is also given to providing safe



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pathways for pedestrians and cyclists, as well as encouraging active and healthy mobility within cities.

- **Environmentally friendly housing:** New city planning relies on the creation of sustainable housing that complies with environmental standards through the use of environmentally friendly building materials and technologies for rationalising energy and water consumption. Green spaces are also integrated within residential neighborhoods, and systems are adopted for collecting and reusing rainwater, thereby creating a balanced and healthy residential environment that considers both human beings and nature simultaneously.
- **Provision of green spaces and public amenities:** New cities allocate extensive areas for public parks, recreational spaces, and open areas that contribute to improving air quality, reducing pollution, and providing places for rest and leisure. This approach helps to enhance the psychological and physical health of residents while preserving environmental diversity within the urban fabric.
- **Community empowerment and participation in decision-making:** Sustainable urban planning focuses on involving citizens in various stages of decision-making through public forums and workshops, which strengthens the sense of belonging and collective responsibility. This, in turn, contributes to building communities that are more cohesive and more capable of adapting to social and economic transformations.

- **Sustainable economy:** The development of the local economy is one of the fundamental pillars in achieving goal 11, as urban planning encourages the establishment of green economic and industrial zones on the basis of innovation and clean technology. It also supports policies that promote investment in sustainable industries and reduce polluting emissions, thereby enhancing employment opportunities and achieving balanced economic growth.

Linking Goal 11 of the Sustainable Development Goals with the planning practices of new cities reveals that urban planning is not merely a technical process but an integrated strategic vision that seeks to build humane cities that simultaneously consider the environmental, social, and economic dimensions. Through this interconnection, new cities become a practical model for embodying the concept of the "sustainable city," which guarantees justice, resilience, and continuity in the face of future challenges.

3. Urban planning for new cities

3.1. Fields of urban planning and basic requirements for new city planning

The fields of urban planning and the basic requirements for new city planning constitute vital pillars in achieving balanced and sustainable urban development, as this process aims to organise urban space and improve the quality of life in cities through an integrated distribution of activities and services in line with the needs of society and the challenges of demographic and economic growth. New city planning is based on a comprehensive vision that takes into account various urban, environmental, and social dimensions in a



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way that ensures that the construction of modern cities is capable of absorbing rapid changes and keeping pace with development requirements. These can be summarised as follows (Bouabdallah & Harzallah, 2023, pp. 24–26).

- **Urban field:** Urban planning seeks to expand the urban fabric through the establishment of new, orderly areas in which engineering, technical, and environmental standards are observed while providing basic infrastructure such as roads, water, electricity, and sewerage networks. It also relies on detailed studies to select suitable sites for construction, taking into account the nature and topography of the land. It aims to achieve a balance between horizontal and vertical expansion, providing urban spaces that meet the current and future needs of the population, with a focus on addressing the deficiencies affecting the existing urban fabric and enhancing its quality.

- **Environmental field:** The role of urban planning is manifested in preserving the natural environment and limiting unregulated urban expansion, which threatens green spaces and agricultural areas. This requires selecting suitable locations for the establishment of new cities that consider environmental and climatic characteristics, such as soil type, rainwater drainage, and wind direction, in addition to allocating green spaces and public parks to ensure environmental and aesthetic balance within the city. Environmental planning also works to protect natural resources and archaeological sites and guarantee the sustainability of ecosystems in the face of increasing urban expansion.

- **Social field:** Urban planning is an effective means of achieving social justice and improving living conditions

through the provision of basic services such as education, health, housing, transport, and recreation while ensuring equitable distribution among different neighbourhoods. This field aims to strengthen social cohesion and foster a sense of belonging among residents by involving them in the development of plans and decision-making related to their cities, thereby contributing to the creation of integrated and stable urban communities. Social planning also focuses on studying the demographic structure of the population, and analysing their current and future needs to guide development in the right direction and ensure a balance between economic growth and social well-being.

Thus, the planning of new cities is based on the integration of three fields, i.e., urban, environmental, and social, within a comprehensive strategic vision that renders the city a coherent unit capable of achieving sustainable development, improving quality of life, and facing future challenges with efficiency and flexibility.

3.2. New city planning options in light of sustainability

New city planning is considered one of the most important tools of contemporary urban development. It aims to establish integrated cities that absorb population growth, provide a balanced living environment, conserve natural resources, and ensure social justice and a high quality of life for residents. This planning is based on sustainability criteria that can be divided into five principal axes: environmental, economic, social, planning and urban, and governance and community participation.

⊗ Environmental criteria:

Environmental criteria are regarded as the cornerstone of new city planning, as they aim to protect natural ecosystems



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and reduce the environmental impact of urban activities. The most prominent of these criteria are as follows (Abu al-Ala & Others, 2014, pp. 33–34):

- **Selecting an appropriate site for the city:** The city's location should be far from agricultural land and environmentally sensitive areas such as forests and wetlands to minimise the impact of urban expansion on the natural environment.
- **Efficient management of natural resources** involves the sustainable consumption of water, energy, and land, as well as the adoption of renewable energy systems and recycling practices to minimise waste.
- **Green spaces and afforestation:** Green spaces are considered an essential part of environmental planning, as they contribute to improving air quality, reducing urban heat, and enhancing public health for residents.
- **Planning for sustainable transport** involves encouraging public transport, walking, and cycling while reducing reliance on private cars to decrease pollution and carbon emissions.
- **Control of urban expansion:** This involves designing a city to achieve a balanced urban density and prevent unregulated sprawl that threatens natural resources.

⊗ Economic criteria:

Economic criteria focus on ensuring sustainable urban development that supports the financial stability of the city and provides diverse economic opportunities for residents (Abu al-Ala & Others, 2014, p. 34):

- **Diversification of economic activities:** This involves supporting multiple sectors, such as industry, trade, and services, to reduce reliance on a single sector and thereby enhance a city's economic resilience.
- **Efficiency in land use:** This involves achieving the optimal use of land by integrating residential, commercial, and service uses in a way that creates an integrated urban environment.
- **The creation of local employment opportunities** aims to reduce daily migration to major cities and provide sustainable economic opportunities for residents of the new city.
- **Attracting investment** is achieved by providing modern infrastructure and a stimulating business climate that enables companies to invest and contribute to the city's development.
- **Sustainable urban financing** involves devising flexible and sustainable financing plans to ensure the long-term continuity of projects and essential services.

⊞ **Social criteria:**

Social criteria aim to achieve justice, social inclusion, and improved quality of life in the new city (Ben Ghadban, 2014, p. 178):

- **Adequate and affordable housing:** Providing suitable housing for all social groups while ensuring equity in the spatial distribution of basic services.
- **Integration of communities and prevention of marginalisation:** Designing neighbourhoods in a way that guarantees a balanced distribution of the population and strengthens social cohesion.



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- **Equitable access to services:** This includes health, educational, cultural, and recreational services, ensuring that they are available to all residents without discrimination.
- **Enhancing community participation:** Involving residents in planning and decision-making stages to increase their sense of belonging and responsibility towards the city.
- **Preservation of cultural identity:** Taking local cultural and urban specificities into account in a manner that reinforces belonging and enriches urban identity.

Planning and urban criteria:

Planning and urban criteria relate to the internal form and organisation of the city to ensure an integrated and adaptable urban environment (Ben Ghadban, 2014, p. 179):

- **Integrated planning:** Linking housing with areas of employment and public services while achieving a network of services and facilities that ensures comfort and efficiency for residents.
- **Gradation of urban densities:** Distributing population and services in a balanced way among neighbourhoods to avoid congestion and to ensure the sustainability of spaces.
- **Smart infrastructure:** Incorporating advanced systems for the management of energy, water, and transport to achieve efficiency and sustainability.
- **Flexible design:** Allowing the city to adapt to future changes such as population growth or climatic impacts.

- **Regional connectivity:** Designing a transport network that connects the new city with surrounding areas to ensure economic and social integration.

ω Governance and participation criteria:

Sound governance and community participation play key roles in the success of any sustainable new city (Abu al-Ala & Others, 2014, p. 37):

- **Transparency and accountability:** Managing projects and services in a transparent manner that ensures performance monitoring and the achievement of desired results.
- **Public-private partnerships:** To achieve efficiency in financing and implementation and in the provision of basic services
- **Involving the local community:** Enabling residents to participate in planning and implementation stages to strengthen belonging and responsibility.
- **Use of technology:** Adopting smart cities and geographic information systems to improve resource management and monitor performance.

Planning new cities in accordance with sustainable development criteria constitutes a strategic orientation that seeks to construct integrated urban systems capable of adapting to future transformations, thereby bringing together the requirements of economic growth, social justice, and environmental protection within a single, balanced framework. Sustainable planning is not limited to merely defining land uses or establishing infrastructure; rather, it extends beyond this to create a comprehensive urban vision that makes the city a productive, healthy, and safe space for all segments of society. Commitment to sustainability criteria in the design and planning of new cities leads to a set



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of positive outcomes that represent the essence of contemporary urban development, most notably the improvement of residents' quality of life through the provision of a balanced living environment and efficient urban services and the preservation of natural resources by adopting rational patterns of land, water, and energy use. These criteria also contribute to strengthening a city's resilience and capacity to withstand future challenges, whether environmental, economic, or social, in addition to ensuring the continuity of economic and social growth in the long term, thereby enhancing the city's ability to meet the needs of present generations without compromising the rights of future generations. Thus, planning new cities according to a sustainability approach becomes not merely a technical or planning option but also a strategic pathway for integrated urban development that aims to build innovative and flexible cities capable of achieving a balance between human beings, space, and the environment within a framework of coherence and harmony among the different dimensions of development (Ben Ghadban, 2014, p. 156).

3.3. The role of urban planning in achieving sustainable urban development objectives

Urban planning is the central tool for achieving urban development objectives, as it constitutes the scientific and practical framework through which efforts aimed at improving the quality of life in cities and ensuring their balance and sustainability in their social, economic, environmental, and organisational dimensions are translated into practice. Urban development cannot be realised merely by formulating policies, plans, and programmes; instead, it

requires the activation of urban planning as a comprehensive approach that guides development processes, monitors their implementation, and measures their outcomes on the ground. This planning contributes to transforming theoretical objectives into practical applications that ensure the optimal use of natural and human resources and help address the challenges generated by rapid transformations in the urban and demographic landscape.

The role of urban planning is embodied through a set of practical tools known as development and urban planning instruments, which constitute executive mechanisms for urban development projects and for monitoring their implementation. The most prominent plans in Algeria are the National Urban Development Plan (SNAT), the Regional Urban Development Plan (SRAT), the Provincial Development Plan (PAW), the Master Plan for Development and Urban Planning (PDAU), and the Land Use Plan (POS). These instruments regulate land use within the urban boundaries of a city in a scientific manner, ensuring a balance among different functions, such as housing, education, health, transportation, industry, commerce, tourism, and recreation. This achieves integration among development dimensions and enhances urban quality of life. In this context, urban planning includes determining the locations of residential neighbourhoods, building typologies, road networks, and public facilities, as well as ensuring the equitable distribution of educational and health services in proportion to population density. It also encompasses transport planning to reduce congestion and traffic bottlenecks by organising transport routes and stops and providing alternatives for public transport. Furthermore, it is



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concerned with planning industrial and commercial areas according to precise economic and geographical criteria and with exploiting natural and historical assets to develop the tourism and recreational functions of cities (Ayash, 2020, pp. 253–254).

Urban planning is characterised as a scientific process that relies on precise field studies and factual data and is based on clear and implementable objectives. It also coordinates various development programmes and projects within an integrated framework that ensures the economy in terms of effort, time, and costs. This planning takes into account the available material, natural, and human resources. It is essential to employ them efficiently according to a hierarchy of priorities while also considering social, economic, and organisational aspects to ensure the inclusiveness and integration of development. Moreover, it encourages citizens to propose and monitor plans and programmes, thereby strengthening the spirit of responsibility and initiative within the local community. Urban planning is distinguished by its flexibility and its ability to adapt to emerging changes through continuous evaluation mechanisms that measure the progress or regression of urban programmes and projects.

In light of all this, it becomes evident that urban planning is the most effective means of achieving sustainable urban development, as it contributes to upgrading urban spaces, improving their performance, and enhancing their efficiency, while taking into consideration two fundamental dimensions: the temporal dimension, which reflects rapid changes in population growth and urban dynamics and necessitates their accompaniment by renewed planning; and

the spatial dimension, which is linked to guiding urban expansion and achieving integration and balance among different cities and urban areas. Thus, urban planning is not merely a technical process for organising space but also a comprehensive strategy that aims to build cities that are more balanced, sustainable, and just in the distribution of resources and services among the various segments of society (Ayash, 2020, p. 254).

Conclusion

In conclusion, planning new cities in light of sustainable urban development objectives constitutes a fundamental pillar in confronting contemporary urban challenges such as rapid population growth, widening social disparities, and increasing pressure on natural resources. Sustainable planning criteria are no longer limited solely to engineering and urban aspects; instead, they have evolved into an integrated framework that combines environmental, social, economic, and technical dimensions, thereby ensuring a balance between the needs of the present and the rights of future generations to a safe and sustainable environment. International and Arab studies alike have shown that the success of new cities is not measured by their physical scale or the number of facilities but rather by their capacity to provide high-quality urban life through the adoption of principles such as spatial justice, community participation, efficient resource management, and the application of innovative and green city concepts. In this context, the importance of linking planning criteria to the Sustainable Development Goals becomes apparent, particularly Goal 11



of the United Nations 2030 Agenda, which seeks to make cities and human settlements inclusive, safe, resilient, and sustainable. Achieving sustainable urban planning for new cities requires a long-term strategic vision based on scientific analysis of the urban reality and the activation of participatory urban governance that takes local and environmental specificities into account, alongside investment in smart infrastructure and clean energy. Only then can new cities be transformed from mere urban spaces into vibrant urban spaces that embody the concept of sustainable development in its comprehensive dimensions and serve as a model for managing the urban future of Arab cities.

The study reached several key findings, which can be summarised as follows:

- Achieving sustainability in new cities requires genuine integration among the environmental, social, and economic dimensions so that urban plans are built on a long-term, comprehensive vision.
- Most new cities in Arab countries continue to face challenges in achieving sustainability because of weak institutional coordination and the lack of strict legislation that mandates the application of modern environmental and social standards.
- Achieving sustainable urban development objectives requires the adoption of participatory planning that involves the local community in the design and implementation stages, thereby strengthening a sense of belonging and collective responsibility.
- Technology and innovation have become two essential elements in new city planning, facilitated by

the application of innovative city concepts and highly efficient resource management.

On the basis of these findings, the study proposes a set of recommendations that would support efforts towards sustainable planning for new cities, the most important of which are as follows:

- There is a need to adopt a clear national framework for sustainable planning criteria that defines measurable objectives and indicators at each stage of planning and implementation.
- Integrating environmental and social sustainability principles into urban legislation and national urban policies.
- The coordination among the various governmental sectors and local authorities should be strengthened to ensure the integration of planning decisions and to avoid duplication of tasks.
- The technical and human capacities of planners and engineers in the fields of sustainable development and thoughtful planning should be developed.
- Encouraging scientific research and academic cooperation between universities and state institutions to innovate local solutions that correspond to the environmental and social specificities of Arab cities.

Therefore, achieving sustainable urban development in new cities is not merely a planning option but also a comprehensive civilisational path that aims to build humane, balanced cities capable of confronting future challenges. The success of this path depends on the extent to which decision-makers and planners are aware of the need to transform sustainability principles into actual practices on



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the ground, thereby making new cities an urban model to be emulated in achieving a balance between human beings and their place and between development and the environment.

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