

# The Impact of Urban Zoning Regulations on Mitigating Urban Sprawl in the Saudi System

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## Abstract

*This study investigates the concept and boundaries of the urban boundary (scope) within the Saudi legal system, illuminating its definition as a policy for directing and controlling urban development. The urban scope is determined by outlining the appropriate boundaries for urban activities and accommodating urban growth within a specified timeframe. This approach aims to achieve the highest economic efficiency for available resources and realize the optimal size for cities and villages according to urban strategic directions. Furthermore, the study delves into the legal framework defining the urban boundary's limits, described as lines delineated on maps that illustrate the various stages of urban development and development protection limits. These boundaries are essential for locating urban activities and absorbing the growth of cities and villages over a specific period. The research highlights that the urban scope serves three primary purposes: directing and controlling urban development, providing public services and facilities efficiently, and achieving the optimal size for urban areas. The establishment of urban boundaries is depicted as a crucial step in preventing urban sprawl and ensuring orderly development. The study also addresses the impact of the urban boundary on preventing urban dispersion, noting that it contributes to reducing the financial costs associated with infrastructure development in low-density areas and addressing visual urban disfigurement. The urban scope's rules, issued by the Saudi government, play a significant role in limiting urban activities outside designated areas, thereby controlling urban sprawl and the spread of informal settlements. Overall, the research underscores the importance of the urban boundary in shaping the urban landscape of Saudi cities, highlighting its role in fostering sustainable urban development and preventing the adverse effects of unplanned urban expansion.*

**Keywords:** Urban Division, Mitigation, Urban Sprawl, The Saudi Regime

## INTRODUCTION

The significant economic boom experienced by the Kingdom of Saudi Arabia, owing to its oil wealth, has led to the rapid growth of cities and villages, surpassing anticipated estimates and planned designs. This expansion resulted in urban sprawl and the horizontal stretching of cities, coupled with the emergence of urban dispersion in various parts of cities and villages. Consequently, the state intervened to mitigate this phenomenon by implementing regulations and laws to control construction across all cities and villages.

Urban boundary regulations stand at the forefront of these rules and laws, acting as a restraint against unplanned urban and village expansion. They curb urban encroachment on rural and agricultural areas, and focus the state's efforts on providing public services to everyone within urban boundaries at a lower cost, as opposed to the dispersal and increased expense of delivering services to sparsely populated areas.

The initiation of urban boundary delineation occurred in the year 1406 AH, following a Cabinet decision that set the urban boundaries for the next twenty years, including conditions for approving city plans. This was followed by Cabinet decision number 175 on 18/9/1409, endorsing the rules for determining urban boundaries.

## Research Questions

The research will answer the following questions:

What is the impact of urban boundaries on reducing urban dispersion in the Kingdom of Saudi Arabia?

What is the effect of urban boundaries on controlling urban development?

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## Research Objectives

To understand the impact of urban boundaries on controlling urban development.

To identify one of the key methods to combat urban dispersion in Saudi cities.

**Previous Studies:** Upon review, I found no prior studies addressing the impact of urban boundaries on reducing urban dispersion in the Kingdom of Saudi Arabia.

**Research Plan:** The research plan includes an introduction, two sections, and a conclusion.

The first section addresses the concept of urban boundaries and their limits, comprising two parts:

The first part discusses the concept of urban boundaries within the Saudi system.

The second part covers the limits of urban boundaries.

The second section examines the impact of urban boundaries on reducing urban dispersion in cities.

## CONCLUSION

### Section One: The Concept and Limits of Urban Boundaries in the Saudi System

The principles of research mandate defining the concept of urban boundaries and delineating their limits. This will be elucidated through the following two subsections:

#### Subsection One: Definition of Urban Boundaries in the Saudi System

The Saudi legislator defines urban boundaries <sup>1</sup> as: "A policy for guiding and regulating urban development by establishing appropriate boundaries for the localization of urban activities and accommodating urban growth within a specified period, along with providing public services and facilities to achieve the maximum economic efficiency of available resources to reach the optimal size of cities and villages in accordance with urban strategic directions" <sup>2</sup>.

A detailed examination of this definition reveals that urban boundaries are a policy framework set to achieve three main goals or purposes:

To guide and regulate urban development, which involves two main actions:

The first: Setting suitable boundaries for the localization of urban activities.

The second: Accommodating urban growth within a specified period.

To provide public services<sup>i</sup> and facilities<sup>ii</sup> with high efficiency.

To achieve the optimal size of cities and villages.

#### Subsection Two: Limits of Urban Boundaries in the Saudi System

The Saudi system defines the limits of urban boundaries as: "The lines depicted on the maps of urban boundary documents that illustrate the various stages of urban development and the development protection limit, representing the appropriate boundaries for localizing urban activities and accommodating the urban growth of cities and villages within a specified period <sup>3</sup>.

From this definition, it is clear that the limits of urban boundaries consist of lines drawn on maps prepared by relevant authorities<sup>4</sup> around cities and villages, demarcating the areas where development is permitted from those where any urban activity is prohibited. This implies that urban boundaries are not defined by physical, tangible markers on the ground such as demarcation or the erection of walls, or by linking them to prominent landmarks. Instead, these boundaries are identified through precise mapping on urban boundary maps.

The regulator clarified that the term urban boundary documents refers to: A collection of technical reports, maps, and regulations that define the different stages of urban development and the development protection zone for cities and villages of the Kingdom until the year 1450 AH <sup>5</sup>.

The establishment of urban boundaries results in a set of regulations, the most significant of which are:

Land planning is only permitted if it falls within the temporally defined stage for urban development according to the regulations of that stage <sup>6</sup>.

Development or planning outside the limits of urban boundaries is prohibited except as provided by these rules or by an exception from the Council of Ministers<sup>iii</sup>. The prohibition in the aforementioned provisions includes banning planning and development whether the lands are privately owned or state-owned. Further discussion on the impact of urban boundaries on individuals' private property rights will be addressed in the third subsection of this demand.

Imposing financial fees on undeveloped (white) lands within the urban boundaries. These fees were established by the White Land Tax system issued by Royal Decree No. (M/4) dated 12/2/1437 AH, followed by Cabinet Decision No. 379 on 8/9/1437 AH, approving the executive regulations, which specified these fees at an annual rate of 2.50% of the estimated value of the white lands.

## **Section Two: The Impact of Urban Boundaries on Mitigating Urban Sprawl in Cities**

Urban sprawl is defined as the establishment of low-density residential neighborhoods or complexes in a scattered manner, separated by large expanses of undeveloped (white) land.

The dispersal of construction and urban development leads to several urban problems, including:

**Increased Material Costs for Infrastructure:** The material cost of infrastructure, which includes establishing public services for residential areas, equals out. Hence, the material cost of infrastructure decreases in areas with high population density.

Conversely, the material cost of infrastructure for areas with low population density is high, leading to a scattering of development efforts. This includes providing public services such as electricity, water, roads, and establishing mosques, schools, and parks in low-density areas, despite the material costs being equal to those in high-density areas.

**Visual Distortion in Cities:** Visual distortion is described as anything that harms the sight and repels it due to incoherent, unharmonious views, and elements that deform the aesthetic appearance of the urban environment <sup>iv</sup>.

This includes the lack of harmony between different building styles and the contrast between old and new construction within the same location. Visual distortion arises from neglect, lack of planning, irresponsible individual, social, and economic behaviors, and deficiencies in social and cultural awareness. Its danger lies in losing the sense of beauty, the collapse of aesthetic considerations, and the acceptance and proliferation of ugly images until they become the norm and law by visual standards <sup>7</sup>.

**The Spread of Informal Housing on the Outskirts of Cities:** Informal housing is characterized as the growth of communities and construction of buildings and areas that do not align with the urban fabric of the societies they grow within or around, opposing the natural directions of growth and extension and violating urban planning laws <sup>8</sup>.

Informal areas generally lack aesthetic aspects, with narrow roads, inconsistent buildings, the absence of parks, green spaces, open places, recreational areas, and the lack of basic amenities such as water, sewage, electricity, transportation, roads, and communications. If these facilities exist, they are often inadequate or dilapidated <sup>9</sup>.

The Saudi regulator has long been aware of this phenomenon, enacting regulations to prohibit it and establishing various administrative bodies to monitor and prevent its spread, as well as developing strategic plans for the development of Saudi cities to mitigate urban sprawl and informal construction.

The urban boundary regulations issued in 1406 AH, and the urban boundary regulations issued in 1428 AH, have had a significant impact on reducing urban sprawl. These regulations contributed to prohibiting urban activities outside the urban boundaries, including:

Banning the development or planning of lands outside the development protection zone except as specified by these rules, or by an exception from the Council of Ministers <sup>10</sup>.

Prohibiting the subdivision, planning, or development of lands within the urban boundaries at its different stages without prior approval from the Ministry of Municipal, Rural Affairs and Housing on the plans before their adoption <sup>v</sup>.

Prohibiting the establishment of public facilities and services outside the boundaries of any stage of the urban boundary before implementing it in the current development stage <sup>11</sup>.

Thus, entities were prohibited from establishing public facilities and services in the phase between 1445 and 1450 AH until they are implemented in the phase between 1440 and 1445 AH.

These regulations have also been effective in preventing the spread of informal construction, as controlling urban development limits the proliferation of informal settlements, achievable only through the application of urban boundary regulations.

## CONCLUSION

From the foregoing, it becomes clear the role of urban boundary rules established by the Saudi system, which have been effective in reducing urban sprawl and informal construction. This led to more coherent urban development among buildings without significant discrepancies in their modernity or antiquity. Additionally, urban boundaries have helped in reducing the material cost of facilities and services, as they serve a large group of buildings and residents, unlike scattered constructions.

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- The Saudi regulator has designated the task of determining urban boundaries to the Ministry of Municipal and Rural Affairs and Housing, as stated in Article 3, Paragraph 13 of the Urban Boundary Regulations, which mentions "This ministry shall prepare detailed maps showing the coordinates of the urban boundary for cities, transport networks, approved plans, and government lands allocated for service projects, to be endorsed by the Minister."
- Refer to Article (1/2) of the Urban Boundary Regulations issued in the year 1428 AH. This included categorizing the lands designated for urban development into two types: the first type being areas available for urban development within specific time periods, referred to as "stages of urban development," divided by the regulator into two phases: the first phase of urban development between 1428 AH and 1435 AH, starting from the issuance of the urban boundary regulations; the second phase of urban development between 1435 AH and 1450 AH. The second type is the support area for development, known as the "development protection zone," which is the area enclosed between the boundary of urban development stages up to the year 1450 AH and the development protection boundary. The regulator defined the "development protection boundary" as the lines shown on the urban boundary documents' maps, delineating the development protection area up to the year 1450 AH (Article (1/6) of the Urban Boundary Regulations up to the year 1450 AH).
- Refer to Article (1/2) of the Urban Boundary Regulations up to the year 1450 AH. The regulator classified cities and villages of the Kingdom into national growth centers, regional growth centers, and local growth centers, according to the classification of cities and villages by the adopted national urban strategy by Cabinet Decision No. (127) dated 28/5/1421 AH. The regulator extensively detailed the controls for different stages of urban development, which include asphalt paving, curbing, lighting of streets, and laying networks for electricity, water, telephone, sewage, and stormwater drainage during the first phase, and in the second phase between 1435 AH and 1450 AH, it also requires the construction of a certain percentage of buildings, varying according to the city where the plan to be approved is located.
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- Exceptions were made for main lines of road networks and public utilities, which are allowed to be implemented outside the urban boundary limits as specified in the second paragraph of Article 3 of the Urban Boundary Regulations. The seventh paragraph of Article 3 allows for the establishment of service projects, temporary uses, or activities of a special nature outside the development protection area under two conditions: the first is the absence of suitable lands within the urban development stages or development protection area; the second is that it must be by a decision from the Minister of Municipal and Rural Affairs and Housing.
- Refer to Article: (3/12) of the Urban Boundary Regulations.

Refer to Article: (3/2) of the Urban Boundary Regulations.

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