Research Article

INFORMAL HOUSING: THE INTERACTION BETWEEN SOCIAL BEHAVIOR AND URBAN SPACE IN BIR EL ATER, ALGERIA

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ABSTRACT

The research addresses the issue of informal housing and the associated social and economic challenges in urban communities, focusing on Bir El Ater, Algeria. It aims to investigate the causes of informal housing in the city and its impact on the social fabric and community well-being. The study seeks to produce findings that will help stakeholders develop effective and integrated programs to mitigate this phenomenon, enhance social cohesion, and align urban planning with sustainable development goals.

The research was conducted in two phases: a theoretical phase followed by fieldwork, including interviews with local officials and urban planning representatives. This approach aimed to diagnose urban planning violations and understand the challenges related to informal housing. The findings revealed that informal housing primarily arises from a gap between residents' practices and land and urban legislation, along with inadequate oversight and practical measures.

Recommendations include integrating theoretical work with flexible practical steps, improving communication between residents and authorities, and enhancing oversight mechanisms. The study emphasizes the need for sound frameworks to balance urban growth and sustainable development, strengthen partnerships between official entities and civil society, and allocate adequate resources to oversight bodies. Raising awareness among residents about urban laws is crucial for reducing violations and improving compliance, ultimately leading to more effective urban planning and development.

Keywords: Informal Housing, Social Dimension, Actors, Urban Planning Tools, Bir El Ater

Background

Urban policy in Algeria, characterized by its spatial and social dimensions, has become a focal point for public authorities seeking to address the challenges of urbanization. Recent legal frameworks have emerged to guide urban planning and land management, underscoring their importance in fostering economic and social growth. These measures aim to enhance the living conditions of residents and promote sustainable urban environments.

This research investigates the intricate relationship between social behavior and urban space, particularly concerning the unplanned expansion of cities. It emphasizes the roles of various stakeholders and their interactions with existing legislative frameworks governing urban development. The city of Bir El Ater, situated in Tebessa Province, serves as a pertinent case study due to its rapid urban growth and the prevalence of informal housing practices. Despite the municipality's efforts and resources, informal development persists, raising questions about the underlying factors contributing to this phenomenon. This study aims to unravel the complexities surrounding informal housing, providing insights into the regulatory gaps and social dynamics that shape urban realities in Algeria.

Introduction

Urban policy, with its spatial and social dimensions, occupies a significant position in the priorities of public authorities in Algeria. This is evident from the numerous legal texts issued in recent years to regulate urban planning and land management, which are considered key instruments for economic and social development. Stakeholders aim to improve cities by providing residents with a suitable living environment while enhancing and developing the areas they inhabit. Within this context, the research focuses on the interaction between social behavior and urban space in relation to unplanned city expansion, highlighting the practices of stakeholders and their engagement with various legislative provisions concerning urban planning and development.

The city of Bir El Ater, located in the southern part of the Tebessa Province in eastern Algeria, has been selected as a case study. As a medium-sized city, Bir El Ater, like many Algerian cities, has experienced rapid urban growth, particularly in recent years. The city has been notably affected by urban planning violations, most evident in the widespread growth of informal housing. Despite the municipality's resources and capabilities to prevent informal urban development, these practices persist. Through this study, we aim to explore the factors contributing to the spread of informal housing and examine the methods and

mechanisms through which stakeholders intervene. The goal is to describe the phenomenon of unplanned urban land consumption, understand its causes, and contribute to a better understanding of the current and future urban realities in Algeria. Additionally, the study seeks to uncover overlooked truths that significantly impact urban development and hinder sustainable growth.

In this research, informal housing refers to any construction that is not legally authorized. There are various terms used to describe this type of development, including unauthorized construction, chaotic building, and shanty housing. According (Zaarai, 2006) "Various terms are used to describe housing constructed outside the framework of public housing projects planned by the authorities, or outside the framework of legally authorized private housing projects, or outside the municipal regulations in force concerning land subdivision and construction in developing countries." Therefore, the informal housing referenced in this study fully aligns with this definition.

Problem Statement

The research addresses the phenomenon of informal housing in Bir El Ater, Algeria, with a focus on the interaction between social behavior and urban space. Informal housing, characterized by unregulated expansion and lack of basic infrastructure, poses a considerable challenge to urban development and social cohesion within the city. The main objective is to explore how social behavior intersects with urban irregularities, leading to the proliferation of informal settlements.

The central research questions aim to understand how community dynamics, social norms, and economic factors shape the spatial organization of informal housing. By examining socio-economic disparities, cultural behaviors, and regulatory shortcomings, the study seeks to uncover the forces driving the expansion of informal housing and its effects on the urban fabric of Bir El Ater. Specifically, the research will assess how informal settlements influence social relationships, access to services, and overall quality of life in the city.

In addition, the study investigates the challenges these housing patterns create for urban

planning and management, proposing solutions that promote inclusive and sustainable urban development. By integrating an analysis of social behavior with urban planning issues, the research aims to offer recommendations for policies that address the root causes of informal housing while preventing its further expansion. The proposed recommendations will focus on improving regulatory frameworks, promoting sustainable urban practices, and enhancing the social resilience of Bir El Ater.

Methods

The research was conducted using an approach that involves analyzing the urban and real estate aspects outlined in Algerian legislation. This was initially achieved through documentary research of legal texts and related powers and tasks embodied in practical regulations. This approach was complemented by fieldwork on the case study, where the theoretical framework was applied to the real-world context. This provided an opportunity to analyze and interpret certain occurrences, draw conclusions, and offer significant recommendations on the topic. The research is structured around three main interrelated axes:

a) **The first axis:** provides an overview of urban planning in Algeria, summarizing key developments post-independence. This axis allowed us to classify the roles of stakeholders in the city chosen as the study example.

b) **The second axis:** involved conducting a survey with a sample of residents. The goal was to collect necessary data and assess how residents deal with urban planning violations.

This methodology enabled us to identify some causes of informal housing and the methods and mechanisms used by concerned parties to mitigate this negative phenomenon observed in Algerian cities. Based on these results, we provided recommendations in the final phase, which we believe offer solutions to the identified issues.

To address the main research questions and formulate appropriate hypotheses, we relied on a survey study of a sample of residents, involving direct contact and data collection.

This approach allowed us to derive several indicators that contributed to shaping the final picture of the research. We selected two residential areas for the study: "Al-Amiriya" and its adjacent informal neighborhood "Al-Amiriya 2" both located on state-owned land. Additionally, we included the residential area "Al-Matar" and its adjacent informal neighborhood "Al-Fajr" both situated on municipal land.

The study sample consisted of 1,132 households, representing 10.12% of the total housing stock in the city. This sample size is sufficient for generalizing the results, as it is distributed across the two types of property ownership in the municipality (state-owned and municipal) and covers both types of real estate management (municipal management under land reservation and agency management under land direction).

Results

Critical Analysis of Urban Planning Tools in Algeria

Since its independence in 1962, Algeria has placed considerable emphasis on urban planning and management. Despite facing resource constraints and limited infrastructure, the country successfully developed an urban planning framework. Initially, this system was built on the first generation of planning tools inherited from the colonial era, with the Master Plan (PUD), introduced in 1958, serving as a key foundation. As noted by (Rachid Sidi Boumedine, 1996), "French legislation continued to be applied in Algeria, alongside other laws that did not contradict national sovereignty, until July 1975, when the French laws were officially discontinued, except for urban planning schemes. These schemes were extended by a circular issued by the Minister of Public Works in 1974, addressing the operations of services responsible for managing the master planning schemes." As stated by (Saïdouni, 2016), "This master plan serves as a tool for programming functions over the long term (15 years) and is the successor to the guiding plan that was implemented during the late colonial period." It failed to accommodate the significant demographic growth during that period and was unable to manage the rapid and

unanticipated urban expansion Algeria experienced after independence. This shortcoming had a detrimental effect on urban settlements, particularly in cities where the unchecked expansion contributed to the rise of informal neighborhoods, disrupting and distorting the urban fabric. The plan was designed for cities with populations exceeding 10,000 inhabitants, as stipulated by the 1967 decree. These planning tools remained in use until the late 1980s. A key feature of this period was the state's recognition of widespread urban violations, which led to the regularization of illegal property holdings through the enactment of legislation in 1985. As noted by (.Ismain, 2003), "The regularization process of illegal occupancy of public land covered approximately 350,000 cases nationwide." The 1980s can therefore be viewed as a transitional period that set the stage for a new phase of urban planning. This shift introduced the second generation of planning tools in the early 1990s, the most notable of these tools was the Master Plan for Urban Planning and Development (PDAU), which was supported by detailed plans for its implementation. This approach emerged as part of a broader shift in Algeria's urban policy, aligning with the real estate guidance law that liberalized real estate transactions and reinforced private property rights. As (Salah, 2010) notes, "Urban policies in Algeria have always been the result of the philosophical concepts inspired by the country's development model."

City of Bir El Ater (Case Study)

Bir El Ater is located in the southeastern part of Algeria, specifically in the southern region of Tebessa Province. It occupies a strategic position, making it a key link between several cities in northern and southern Algeria, as well as a gateway for cross-border transit between the country's interior and its neighboring countries. Being a border city with Gafsa Province in the Republic of Tunisia, Bir El Ater holds significant geopolitical importance.
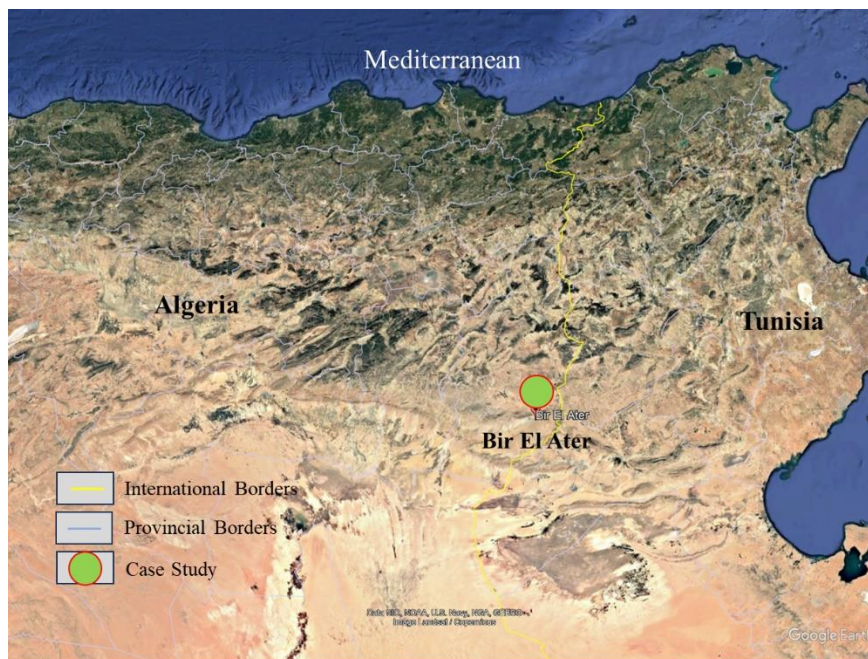

Figure 1: Satellite image showing the location of the city of Bir El Ater
Source: Google Earth, processed by the researcher, 2024

The city is also steeped in ancient history, as it is connected to the prehistoric Aterian civilization. As noted by (Amoura, 2006) "Among the civilizations that emerged in North Africa during the Stone Age, we mention the Acheulean and the Aterian civilization, named after Bir El Ater near Tebessa." This historical significance adds to the city's rich cultural heritage. The municipality of Bir El Ater covers an area of approximately 198,734 hectares, The urban area of Bir El Ater spans approximately 1,042.50 hectares, and according to the latest

population census of 2022, the city has an estimated population of 108,765 inhabitants, with 92% residing within the urban area. Bir El Ater serves as the central hub for essential services and public facilities in the region, making it a critical urban center for the surrounding areas. The city is situated at an average elevation of about 880 meters above sea level, adding to its unique geographic and climatic conditions, which have influenced its urban development and growth.

Residents' Practices (Reflecting the Widening Gap with Urban Legislation)

After reviewing the roles of various stakeholders in addressing informal housing, we developed a comprehensive understanding that allows us to evaluate the diverse practices impacting the urban landscape. In the next phase,

we focused on examining the practices of residents, who are crucial in shaping the urban environment. We conducted a survey study to analyze how the residents of Bir El Ater interact with urban and real estate regulations.

This survey involved direct engagement with a sample of the population, enabling us to collect data on their behaviors and perceptions regarding urban planning laws. By exploring their attitudes and practices, we aimed to understand the growing disconnect between residents and urban legislation. This gap often leads to non-compliance with regulations, contributing to the proliferation of informal housing. The insights gained from this study reveal key social factors influencing this issue, offering a foundation for a more comprehensive approach to tackling the challenges associated with informal settlements in urban areas.
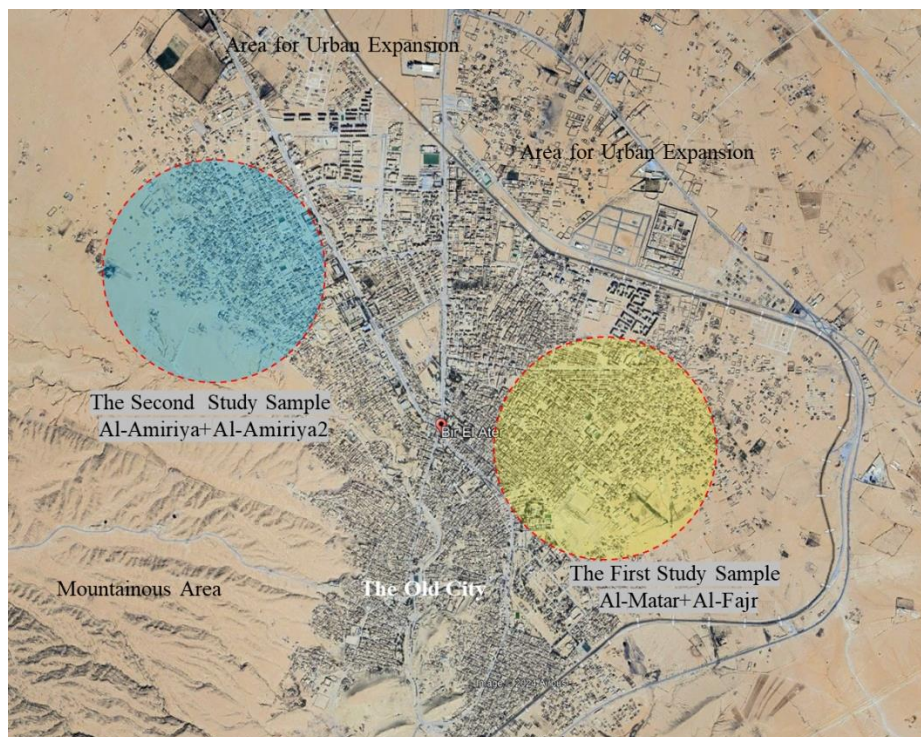

Figure 2: Satellite image showing the locations of the study sample
Source: Google Earth, processed by the researcher, 2024

This approach enabled us to derive several indicators that shaped the final outcomes of this research. We selected two housing allotments: "Al-Amiriya" and its adjacent informal settlement "Al-Amiriya 2," both situated on state-owned land. Additionally, we included "Al-Matar," another housing allotment, and its

neighboring informal settlement "Al-Fajr," both located on municipality-owned land (Figure 2).

The study sample comprised 1,632 housing units, representing 10.12% of the total housing stock in the city. This sample size is adequate for generalizing the results, particularly as it

encompasses two types of properties (state-owned and municipality-owned) and two distinct real estate management systems: one managed by the municipality under land reserves and the other by the real estate agency according to urban land-use planning guidelines.

This distribution allowed for a thorough assessment of urban practices related to land use, in both formal and informal contexts. The findings illuminate the broader dynamics of urban development in Bir El Ater and offer a solid foundation for proposing practical solutions. The results can be summarized in the following key points:

Residents' Interaction with Urban Legislation

This section seeks to elucidate the relationship between residents and urban legislation, aiming to assess the effectiveness of these laws in reaching the public and understanding their responses to these legal measures. The study enabled us to collect residents' opinions and evaluate the alignment of their behaviors with the established legal frameworks. The key findings are as follows:

A. Among Residents of Informal Settlements (Al-Fajr and Al-Amiriya 2)

- **Percentage of Residents Unaware of Committing Urban Planning Violations**: 80.07% of the residents in these informal areas were unaware that their construction activities constituted violations of urban planning laws.

This significant proportion highlights a gap in communication and enforcement of urban regulations, suggesting the need for better public awareness and education about urban planning rules and their implications.
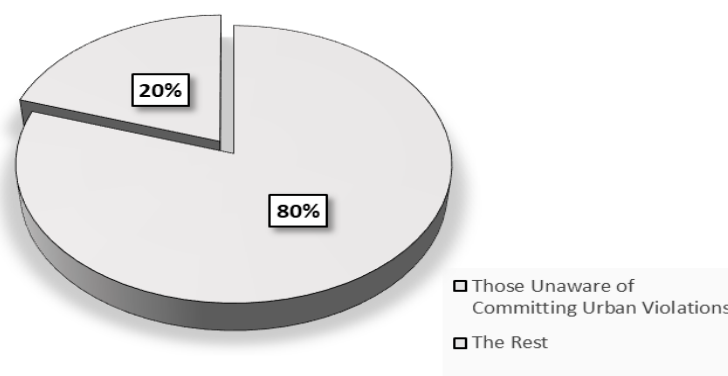

Figure 3: Sample of the Population Unaware of Urban Violations

This percentage can be explained by the widespread presence of illegal buildings, which has led the majority of the sampled population to believe that construction can commence without prior permits. In their view, this practice is not considered a violation of urban planning laws.

As for the remaining 19.93% of the sample, their responses did not necessarily indicate a clear understanding of urban and property regulations. Their answers were varied and did not lean toward a specific direction that could be classified, highlighting the complexities and inconsistencies in how residents perceive and engage with urban legislation.

- **Percentage of those unaware of the existence of urban planning tools:** 95.57%

Most respondents believe that urban planning is limited to subdivisions with formal ownership deeds. This finding supports our initial hypothesis, which highlights the widening gap between the residents, as users and occupants of urban spaces, and the actual real estate and urban planning regulations in place. This disconnect is also referenced in the guidelines of the International Conference on Local Community Transformations (Steckel-Assouère, 2014).
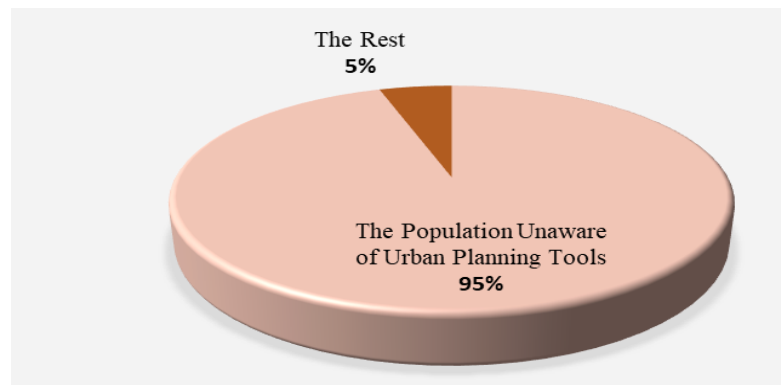
Figure 4: Sample of the Population Unaware of Urban Planning Tools

This large knowledge gap reflects a key social dimension of the issue, where insufficient awareness of legal frameworks among the population results in a growing trend of unregulated urban expansion. Addressing this gap is crucial for any efforts aimed at managing urban sprawl and improving the sustainability of urban development.

- **Percentage of those whose construction activities were halted stands at:** 33.62%

This figure indicates that a third of the violations committed by residents were actually observed by the relevant authorities (the Municipal Committee for Combating Illegal Construction). However, violators did not comply with the orders to stop work or the warnings issued by the committee, continuing to complete their buildings as usual. Simultaneously, there was a lack of follow-up from the concerned authorities to enforce demolition procedures.

This reflects not only the social dimension of the problem, where residents exhibit a disregard for urban regulations, but also the inefficiency or absence of strict law enforcement mechanisms. The combination of these factors perpetuates the spread of illegal housing and undermines efforts toward organized urban development. Strengthening the communication between residents and authorities, along with rigorous enforcement, is necessary to address the issue effectively.
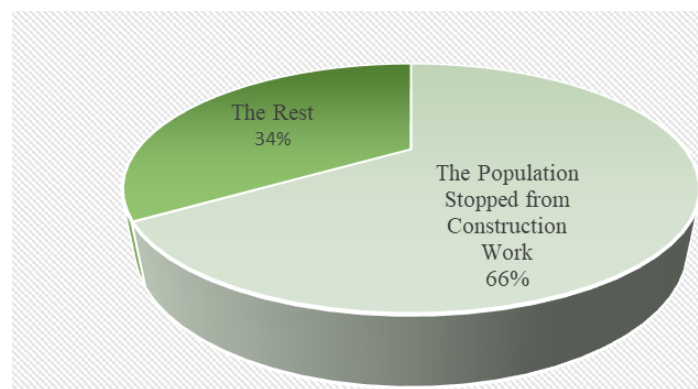

Figure 5: Sample of the Population Stopped from Construction Work

B. Among Residents of residential subdivision:

- **Percentage of Those Who Reviewed the Terms of the Land Plot Purchase**: 7.14%

This percentage reflects the extent to which residents ignore the conditions they are supposed to adhere to when purchasing land. According to their feedback, most residents did not buy their land plots from the municipality or real estate agency, but rather from private individuals (through secondary sales). They had not reviewed the terms of the purchase agreements at all. Many residents believe that the administrative contract alone is sufficient for them to use the land as they wish.
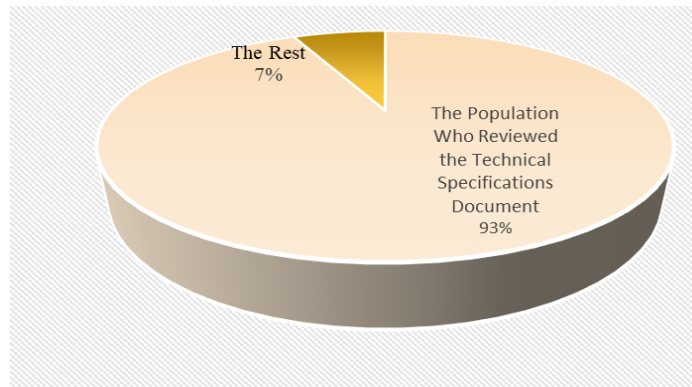
Figure 6: Sample of the Population Who Reviewed the Technical
Specifications Document

Conversely, the remaining 92.86% of residents regard the terms of the purchase agreement as unimportant. They perceive it as not meeting their personal and family needs, especially concerning the built area, room sizes, and courtyard height. This widespread disregard for the terms underscores a critical gap between the formal requirements of land use and the actual practices of residents, contributing to the persistence of informal housing developments and highlighting a need for better integration of planning requirements into residents' decision-making processes.

- **Percentage of Those Monitored During Construction**: 2.85%

This figure represents cases where construction was monitored by the state's urban planning inspector. However, municipal authorities did not conduct any inspections of the housing developments, as confirmed both through field observations and interviews with municipal officials. The officials stated that they limited their oversight to constructions outside the housing developments due to limited financial and human resources and the rapid spread of informal buildings outside these areas.
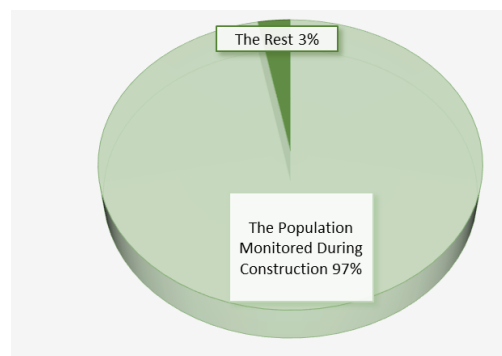

Figure 7: Sample of the Population Monitored During Construction

This low percentage of monitored constructions highlights a significant gap in enforcement and oversight, suggesting that many informal housing projects proceed without adequate supervision. This deficiency contributes to the proliferation of unauthorized buildings and underscores the need for improved monitoring systems and resource allocation to ensure compliance with urban planning regulations.

Resident Compliance with Urban Planning and Construction Regulations

Our objective in addressing this section was to assess the extent of residents' adherence to general urban planning and construction regulations and to understand their acceptance of policies set by urban planners. We focused on residents of the two housing developments since they have the potential to obtain building permits and compliance certificates. The results are as follows:

In Terms of Obtaining Building Permits

The survey sample showed a certain level of commitment to obtaining building permits. The percentage of residents who applied for building permits was 82.60%, with the distribution as follows: **Al-Amariya**: 90.90%, **El Matar**: 70.83%.

This data indicates a significant proportion of residents in the surveyed areas are compliant with the regulations concerning building permits. This suggests a positive response to formal urban planning measures among those who have access to legal construction processes. However, the variation in compliance rates between the two developments may reflect differences in the residents' experiences or challenges in navigating the permit process.
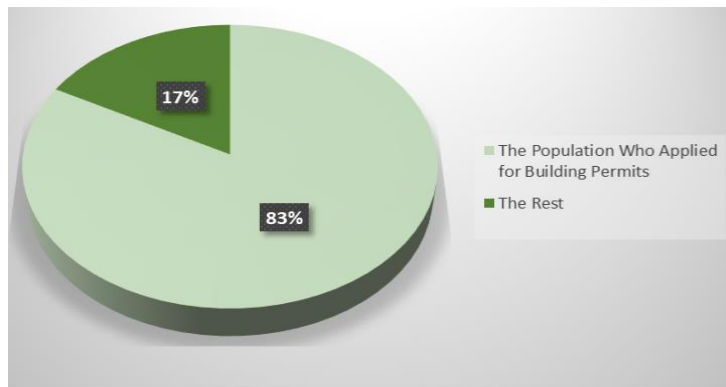

Figure 8: Sample of the Population Who Applied for Building Permits

- **Percentage of Those Who Actually Obtained Building Permits (from Applicants)**: 78.94%.

  This percentage is distributed as follows:
  - Al-Amariya (Managed by the Real Estate Agency): 87.50%

- Airport (Managed by the Municipality): 58.82%

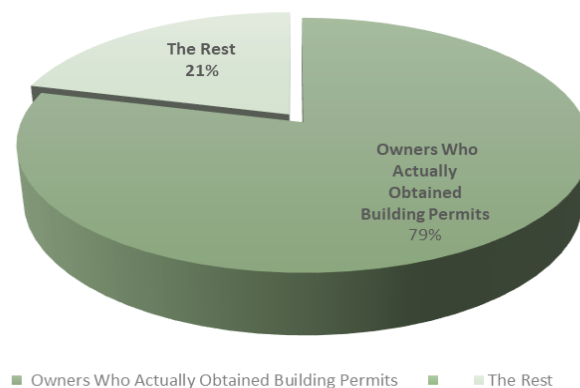This result closely aligns with the officially recorded percentage in municipal records, which is 76.16%.

Figure 9: Percentage of Owners Who Actually Obtained Building Permits

These findings indicate that a significant majority of those who applied for building permits were successful in obtaining them, with a higher success rate in developments managed by the Real Estate Agency compared to those managed by the Municipality. The variation between the two management types could reflect differences in the efficiency of the permit issuance processes or varying levels of administrative support available in each development.

Discussion of Results

a) Urban Dimension

The results from the survey reveal a significant gap between the current state of urban planning and the regulations intended to govern this field. The data shows a noticeable discrepancy between legal texts and their actual implementation, reflecting weaknesses in the effectiveness of planning and oversight tools.

- **Knowledge Discrepancy:** A large percentage of residents are unaware of the laws and procedures required for constructing housing. This gap indicates a lack of awareness and communication from the relevant authorities. Such a disconnect leads to unplanned and disorganized land use, contributing to the emergence of illegal residential areas.
- **Oversight Impact:** The survey revealed substantial shortcomings in monitoring and implementing technical oversight during construction processes. This neglect results in regulatory breaches and non-compliance with urban planning standards, exacerbating the issue of illegal construction. Contributing factors include limited financial and human resources and ineffective oversight mechanisms.
- **Spread of Informal Construction:** The deviations from planning regulations lead to an expansion of unplanned construction, evident in informal residential areas that lack infrastructure and essential services, negatively impacting urban life quality.

b) Social Dimension

From a social perspective, the results highlight the profound effects of the gap in knowledge and application between residents and urban regulations.

- **Awareness of Regulations:** A significant portion of the population, especially in informal neighborhoods, is unaware of the available planning tools and zoning regulations. This lack of knowledge fosters the spread of illegal construction and non-compliance, widening the gap between organized and unorganized residential areas.

- **Interaction with Legal Arrangements:** The variation in residents' responses to planning regulations indicates a lack of interest or understanding of their importance. Most individuals, particularly in informal settlements, do not consider building laws significant, reflecting either a lack of trust or comprehension of the regulations' benefits.
- **Satisfaction and Needs:** The social interpretation of this behavior may be linked to the regulations' failure to address residents' actual needs. Those in informal areas might feel that current laws do not meet their practical requirements, leading them to seek quick, illegal solutions.
- **Impact of Neglect on Communities:** Neglect in enforcing laws and administrative measures increases residents' sense of insecurity and instability. This neglect can exacerbate social issues such as poverty, inadequate services, and lack of essential amenities, adversely affecting the quality of life.

In the context of Bir El Ater, the interplay between social behavior and the urban environment reveals significant insights into the dynamics of informal housing. The city's rapid urban growth, coupled with limited regulatory enforcement, has fostered a unique interaction between residents and their surroundings. Social behaviors, such as the perception of informal housing as a viable solution due to limited access to formal housing options, directly influence the expansion of informal settlements. Residents often engage in practices that reflect a disconnect between their understanding of urban regulations and the legal frameworks in place. This misalignment contributes to the proliferation of informal housing, as individuals adapt their behavior to circumvent regulatory constraints. By examining the case of Bir El Ater, we can see how social behavior and urban planning intersect, leading to the emergence of informal neighborhoods that challenge the city's formal planning and management systems.
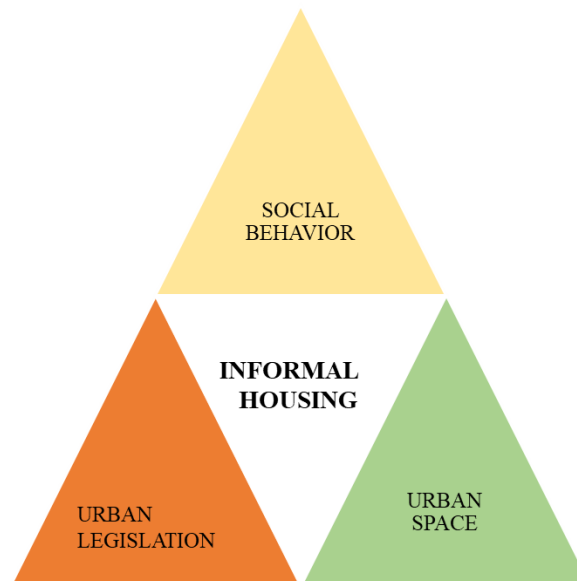
Figure 10: The Relationship Between the Causes of Informal Housing

Recommendations

In light of the findings from the research conducted in Bir El Ater, the following recommendations are proposed

a) **Enhance Citizen Participation**
- **Implementation of the 2011 Municipal Law:** Activate the provisions for citizen participation as outlined in the latest municipal law of 2011. This approach will help anticipate and address negative reactions that may impact the urban fabric of the city. Engaging the community in urban planning processes can foster better compliance and integration of local needs into planning decisions.

b) **Decentralize Decision-Making**
- **Promote Horizontal Approaches:** Avoid centralizing decision-making by integrating a horizontal approach in planning, programming, and implementation. Empower local authorities with the necessary powers and resources to manage local affairs in a participatory manner. This will enhance responsiveness and adaptability to local conditions and needs.

c) **Develop a New Generation of Urban Planning Tools**
- **Modernize Planning Instruments:** Consider creating a new generation of urban planning and development tools in Algeria to keep pace with modern planning practices and methodologies. Updating these tools will improve the effectiveness and efficiency of urban management and address current challenges more effectively.

d) **Establish Specialized Urban Management Institutions**
- **Create Dedicated Institutions:** Establish institutions specifically tasked with city management, defining their structure and roles within the framework of sustainability and good governance. These institutions should be responsible for overseeing urban development, ensuring compliance with regulations, and promoting sustainable practices.

Conclusion

The research highlights a significant discrepancy between theoretical urban legislation and planning tools and the actual practices of stakeholders on the ground, particularly concerning informal housing. The field study in Bir El Ater reveals that the triangular relationship between the city, the main actors, and the residents is fraught with challenges. This relationship often fails to align with the residents' needs, contributing to the proliferation of informal housing.

Key findings emphasize that a large percentage of the population, particularly those in

informal settlements, lacks awareness of urban regulations and planning tools. This gap between theoretical knowledge and practical application is exacerbated by insufficient oversight and inadequate resources allocated to urban management. Such shortcomings have led to the emergence of informal housing areas, which are a direct consequence of weak enforcement and planning practices.

The social dimension of this issue is critical, as it reflects how residents' responses to urban regulations and their socio-economic conditions drive them towards informal housing solutions. Understanding the social dynamics and psychological factors influencing residents' choices is crucial for addressing this problem. There is a clear need for more effective and participatory urban planning and management approaches.

Future research should focus on exploring the social and psychological factors behind informal housing, in partnership with local stakeholders. Practical solutions should be developed to mitigate urban chaos and reduce the long-term costs associated with legal and urban planning adjustments. Addressing these issues requires a comprehensive approach that integrates social, economic, and urban planning perspectives to create sustainable and inclusive urban environments.

Acknowledgment

References

1. Zaarai, F. (2006). *Urban Expansion in a Suburb of Tunis: The Case of Northern Ariana.Tunisia.* Tunis: University of Tunis.
2. Rachid Sidi Boumedine, M. T. (1996). la recherche urbaine en Algérie: un état de la question. *pratique urbaine*, 33.
3. Saïdouni, M. (2016). The Crisis of Modernization and Urban Planning in Algeria: Its Roots, Reality, and Prospects. *Omran*, Volume 4, Issue 16, p. .18.
4. Ismain, C. (2003). *The Algerian Legal System for Real Estate Planning: A Descriptive and Analytical Study. Algeria.* Algiers: Huma Publishing House.
5. Salah, B. (2010). la production de l'urbain en Algérie entre planification et pratiques. *espace et territoires*, 135.
6. Amoura, A. (2006). *Algeria: Gateway to History - Prehistory to 1962, General Algeria.* Algiers: Dar Al-Maarifa.
7. Steckel-Assouère, M.-C. (2014). *Crossed Perspectives on the Changes in Intermunicipality: Proceedings of the International Conference on Crossed Perspectives on Intermunicipality held on May 30-31, 2013 at the .* Paris: University of Lorraine.
8. **Raffaele Cattedra**. (2010). *Grand Urban Projects in the Quest for Peripheries. Les*
9. **Compilation of Legislative Texts on Real Estate Organization and Management**: (First National Conference of the National Association of Local Agencies for Urban Real Estate Management and Organization) Tebessa Printing House, 1997.