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THE COMMERCIAL DYNAMICS OF AIN MLILA (ALGERIA). NUMEROUS SPATIAL REFLECTIONS AND SUPPORTING ELEMENTS

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ABSTRACT

The unmistakable area of Ain Mlila city within the heart of the Constantine tall fields, at the crossing point of National Street 03 and National Street 100, and close major urban centers in eastern Algeria (Constantine, Batna, Setif...), played a significant part in its development and commercial and urban renaissance. It changed from a little provincial settlement with 12 shops in 1869 to a dynamic urban and commercial center with 16791 shops in 2020 (Commercial Registry Office of Oum El Bouaghi Wilaya, 2022), generally claimed by neighborhood dealers at 60%, with a clear specialization in car save parts speaking to 44.3% of add up to commercial action shops, agreeing to a field consider conducted amid the investigate.

Family and tribal systems, and universal openness to worldwide commercial markets in Africa, Europe, and Asia, played a essential part in quickening development and commercial improvement forms. This made a commercial energetic reflected in engaging quality for both dealers and clients, which affected numerous other urban factors, whether spatial-urban or statistic.

The city seen an astonishing statistic change, with its populace expanding from 5063 tenants in 1954 (Common Populace and Lodging Census, Common Government of Algeria, 1954) to 116641 occupants in 2020, agreeing to gauges from the Respectful Status Office of Ain Mlila Municipality. Commercial exercises differentiated to incorporate nourishment exchange at 30.3%, clothing and footwear exchange at 19%, with car save parts exchange overwhelming. Commercial hones were dispersed between retail deals (49.4%), discount deals (28.2%), and semi-wholesale deals (22.4%) (Field consider, 2023).

The Ain Mlila demonstrate reflects the capacity of Algerian cities to use their topographical characteristics and social properties to realize nearby improvement based on commercial action advancement, profiting from their openness to worldwide markets and their capacity to adjust to quick financial changes.

KEYWORDS

Commercial Dynamics, Automotive Spare Parts Trade, Urban Growth, Ain Mlila, Algeria

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Introduction.

Trade is considered one of the foremost critical influencers in urban and architectural spaces, and the essential driver of spatial and financial changes within the advanced period. It is the basic determinant of spatial forms and concentrations of urban populations. Exchange isn't constrained to financial capacities alone, but amplifies to different social and spatial capacities on a very basic level connected to the concept of commercial trades. This has contributed to the interweaving of a chain of social, financial, and spatial intelligent alike. Exchange is considered one of the foremost critical influencers in urban and engineering spaces, and the essential driver of spatial and economic transformations within the present day time. It is the basic determinant of spatial forms and concentrations of urban populations. Exchange isn't constrained to financial capacities alone, but expands to different social and spatial capacities on a very basic level linked to the concept of commercial trades. This has contributed to the interlacing of a chain of social, financial, and spatial intuitive alike. (Pierre Bergel and Nadia Kerdoud, 2010, P 76).

Within the middle of these financial changes, Ain Mlila develops as a unmistakable demonstrate of commercial dynamism and urban development in Algeria. Trade changed from a minimal action to a imperative financial supply route, with roots expanding to the late eighties, when Algeria experienced an financial opening that rebuilt the commercial, social, and urban scene (Mohamed BenHamou, 2021, p45). This turning point represented a significant key move within the city's trajectory over different spaces, contributing to making a commercial energetic based on different columns, (Mohamed El-Ghazali, 2019, p22), strikingly the exchange of car and truck spare parts, which witnessed an bewildering increment within the past two decades, hopping to over 5.5 million vehicles agreeing to national factual center information, driving to expanded request for spare parts and enhancing a wide arrange of dealers and distributors in the city.

The unmistakable geological area of Ain Mlila within the Eastern High Fields locale played a essential part in accomplishing this dynamism, because it is centrally situated in eastern Algeria, making it a recognized calculated center effortlessly open from different parts of the nation. (Slimane Haddad, 2018, p. 15).

These combined establishments had a critical effect on a few viewpoints, driving too fast urban extension, went with by the rise of specialized commercial zones in particular exchange categories and major commercial axes along fundamental streets.

This had demographic implications, as commercial attractiveness created jobs, improved living standards, social stability and attracted traders and workforce, which reinforced the city's urban and economic dynamics. (Mohamed El-Ghazali, 2019, p 37).

This had a big impact on rapid urbanisation, infrastructure development and prosperity in services, industry and investment activities related to the evolution and concentration of car and truck spare parts trade. But this growth also had spatial challenges. (World Bank Report, 2019, p. 18)

Ain Mlila is the embodiment of historian Henri Pirenne's famous statement: "*The city is the daughter of trade*", a unique experience of economic transformation in emerging Algerian cities. Here historical, geographical, and economic factors are intertwined to create a new and evolving urban landscape, showing the ability of local communities to adapt and innovate in the face of economic changes.

The main question is to understand the link between commercial dynamism and urban growth in Ain Mlila, which requires examining the distribution of economic activity, services and the economic and social factors of commercial dynamism and their impact on urban dynamics, and demographic growth, migration, urbanization and property consumption.

Research Objectives: This study seeks to achieve the following objectives:

- Study the commercial layout of Ain Mlila city, its spatial distribution and its role in the economic identity of the city in the eastern Algeria context.
- Look at the relationship between trade and urbanization, its impact on population growth, urban sprawl and how it feeds urban dynamics.
- Study the economic and social impact of trade especially in the light of the national economic changes and how it improves the living conditions of the residents and creates jobs.

Methodology and Data: To achieve the objectives of studying the relationship between trade and urbanization in Ain Mlila city we used an integrated research methodology, which combines quantitative and qualitative methods, a multidimensional scientific approach based on the descriptive-analytical method to study the trade reality and its impact on urban and economic fabric.

We also used the historical method to study the evolution of these activities and their link to economic and social changes in the city.

The statistical method was used to analyze the quantitative data of trade volume and its spatial distribution, and case study approach was used to go deeper into the study according to the city's features and its commercial pattern.

Research steps included data collection through literature review and previous studies, gathering statistical data from official bodies and commercial chambers, and field survey of all trade categories in the city.

Fieldwork included in-depth interviews with traders and local officials, distribution of questionnaires to a sample of residents and traders, and then analyze the quantitative data using SPSS statistical software to measure social and economic impacts.

Arc-GIS was used to analyze the spatial distribution of trade and its impact on urban fabric, the study ends by presenting the results and recommendations.

The study is based on multi-dimensional approach including economic approach to understand the economic dynamics especially commercial one and its impact on urbanization; geographical approach to study the spatial distribution of trade and its effect on urban sprawl; social approach to study the impact on population and influx.

By this integrated methodology and multi-dimensional approach, the research can provide a comprehensive and accurate analysis of trade and commercial dynamics' impact on urban, economic, and social domains in Ain Mlila city.

The geographical location of Ain Mlila city is a catalyst for commercial activity development.

The name "Ain Mlila" reflects the white salty land in the local dialect, revealing the geographical nature of the region that was once a salt lake area. However, due to changing climatic factors, it dried up, becoming an open area that hosts an important annual market during the autumn season. (Stéphane Gsell, 1929, p148).

Ain Mlila is a unique model of urban and economic development in Algeria, where its geographical location played a pivotal role in shaping its commercial identity and economic dynamics. Its initial nucleus in its current form was established in 1869 during the colonial period. However, the region has historical importance acquired as a stopping point for nomads, pilgrims, and traders heading towards the Levant and Morocco, considering it has water resources and is centrally located among many rural areas and local tribes since ancient times.(Mohamed Ibrahim El-Mili, 1980, p. 133).

The city's history is closely tied to its administrative developments. During the colonial period, it served as a mixed municipality. In 1957, it was elevated to the status of a district and administratively belonged to Constantine Province, a situation that continued after independence according to the 1963 organizational structures. At that time, the district included the municipalities of Ain Mlila, Ain Kercha, Ain Fakroun, Sigus, Bir Echouhada, and Telaghma.

In 1974, during an administrative reorganization, the Ain Mlila district was transferred to Oum El Bouaghi Province, and the Telaghma municipality was removed from its jurisdiction. Following the 1984 administrative division, several municipalities were separated from it due to an increase in the number of municipalities and districts. The Ain Fakroun district was created, along with new municipalities including Ouled Zouai and Ouled Hamla. In its current administrative configuration, Ain Mlila serves as a district headquarters encompassing the municipalities of Ain Mlila, Ouled Gacem, and Ouled Hamla (Report of Land Use Plan No. (04) and (05) for Ain Mlila Municipality, 2014, p.5).

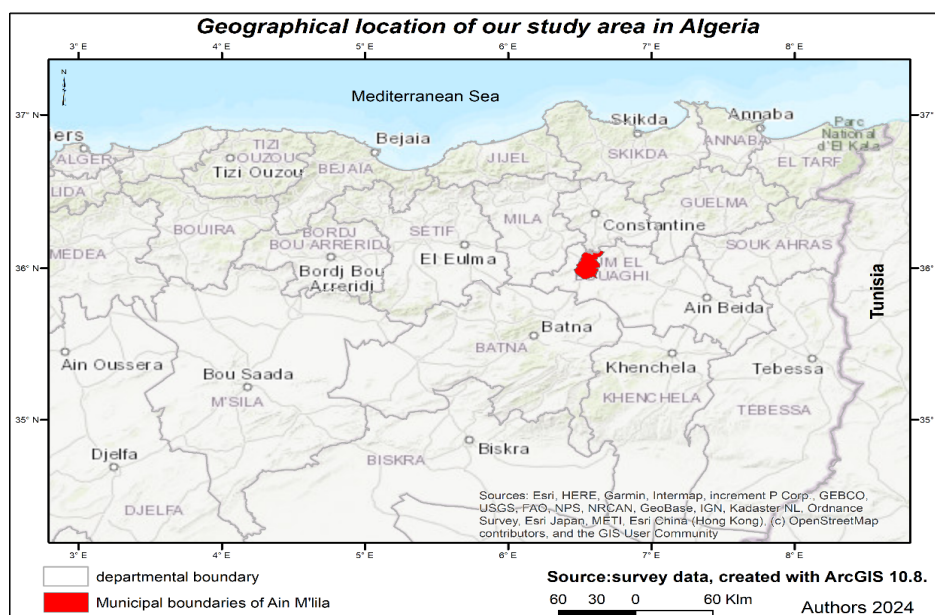
With the economic transformation experienced by Algeria, and thanks to its historical significance, the city underwent notable changes in its infrastructure and economic activity. These developments contributed to strengthening its position as one of the important commercial centers in Algeria (Mohamed Ben Hamou, 2021, p53).

Ain Mlila city is located in the heart of the Constantine High Plains, (Map 01: Geographic location of our study area in Algeria), at an average altitude of about 771 meters above sea level, extending over an area of 239.33 km². It occupies a strategically important location, situated between the two most important mountain ranges in Algeria: the Tell Atlas in the north and the Saharan Atlas in the south. At its center, National Road 03 and National Road 100 intersect, which are considered among the most important national roads. (Ain Mlila Municipal Urban Planning Directive Plan Report, 2008, p. 12).

National Road 03 connects Skikda port in the north to the Niger border in the south, passing through all major cities in the Eastern and Southeastern Algerian regions (Skikda, Constantine, Ain Mlila, Batna, Biskra, Hassi Messaoud, Illizi, Djanet, Algerian-Niger border) over a distance of more than 2,102 km. Therefore, it is the most important road for passenger and goods movement between the north and south of Eastern Algeria.

National Road 100 connects National Road 5 (the most important road linking Northeastern Algeria to the capital) and the East-West Highway at Chelghoum El Aid municipality on one side, and National Road 10,

which extends to the Tunisian border passing through Oum El Bouaghi and Tebessa provinces. (National Road Classification in Algeria, Official Gazette January 31, 1990).



This importance has made Ain Mlila a transit point between different regions of the country, connecting north and south, east and west, and even international crossings. This has facilitated transportation and trade. (Mohammed El-Ghazali, 2019, p. 28).

The city is bordered by: Constantine Wilaya to the north, Ouled Gacem district to the east, El Harmelia district to the southeast, Ouled Zouai district to the south, Souk Naâmane district to the southwest, and Ouled Hamla district to the northwest. (Monograph of Oum El Bouaghi Wilaya, 2020, p.57). This vital area essentially contributes to the urban center's development, empowering a vital dual development along north-south and east-west tomahawks. This portability has changed the city's financial and social capacities, turning it into an alluring center for differing commercial exercises. The topographical characteristics have situated Ain Mlila as a imperative center for commercial and agrarian exercises, improving its potential for commerce foundation. In addition, the city serves as a basic hub within the urban organize of eastern Algeria, encouraging commercial extension and making work openings for nearby inhabitants (World Bank, 2020, p 17).

Commercial Dynamics and Urban Growth in Ain Mlila: A Multi-Dimensional Explanatory Approach.

For conducting, a study about the relationship between commercial elements and urban development in Ain Mlila city requires a comprehensive inquire about handle, based on analyzing and examining its commercial structure, highlighting its transient advancement ways and affecting variables. This requires a exact examination of financial and statistical factors to get it the complex flow administering the relationship between commercial movement and urban development. The quintessence of the approach lies in observing basic changes of the commercial texture, analyzing socio-economic flow, and examining business conveyance designs over distinctive segments, whereas looking for to highlight the associations between the city's commercial specialization and its commercial and urban engaging quality. Center will be set on its suggestions for urban developments and spatial utilization. This requires an in-depth perusing of the financial and social changes experienced by the city amid later decades, which have made it a recognized commercial center at the national level. Ain Mlila is now not only a geological space, but has become a crucial space where commercial flow associated with urban space and human behavior. We are going endeavor to dig into its subtle elements, and appropriately, we can note the following:

1. The Commercial Structure of Ain Mlila: Numerous Characteristics Contributing to Commercial Elements:

Ain Mlila risen within the late 19th century as a unassuming rural range beneath French colonial run the show, with the essential objective of abusing the rich encompassing rural lands. Amid this foundational stage,

which expanded from 1869 to 1973, the city's financial movement was greatly constrained. Inhabitants essentially worked in farming and animals cultivating for French colonizers. The city's commercial foundation was simple in its early stages, with as it were 12 basic commercial foundations in 1869, generally associated to rural exercises and conveyed along National Street No. 03. This circumstance held on all through the colonial period and proceeded into the early a long time taking after Algeria's freedom, amid which the city did not involvement noteworthy improvement in its commercial structure. The beginning commercial scene was characterized by its straightforwardness and coordinate association to agrarian financial exercises, reflecting the city's rustic roots and the imperatives of colonial financial organization. By 1973, the number of commercial foundations marginally expanded to as it were 122 shops, reflecting the moderate beginning commercial improvement within the city amid this early arrange of its history.

The period between 1973 and 1996 seen a crucial change in Ain Mlila's financial structure, transitioning from a conventional agrarian economy to a promising commercial center. This alter started with the development of create businesses and the foundation of the CABAM Forsake Rooms manufacturing plant, which played a catalytic part in commercial action. This driven to an increment in commercial foundations from 122 to 436 within the early 1980s, for the most part craft-related shops. With the Algerian society's openness to the world through relocation and travel, and progressed living conditions, a hole risen between advancing societal needs and existing financial and commercial approaches. This circumstance come about in a enormous cross-border parallel exchange from Europe through travelers' gear, which got to be the as it were outlet for society to get different clothing and differing necessities. The financial move towards a promote economy inside the late 1980s stamped a significant turning point, clearing the way for veritable commercial takeoff. Thus, the city experienced essential commercial advancement, reflected inside the increase of commercial establishments to 3,900 by 1996, outlining the subjective bounce in commercial enhancement driven by financial liberalization courses of action.

From 1996 to 2016, Ain Mlila experienced an unprecedented organize of quick money related and commercial improvement. This period was characterized by the enhancement of all inclusive trade relations. Various adjacent merchants viably built supply frameworks with accessories from France, China, and Turkey in clothing trade, and with Egypt, Dubai, China, and Asia in car spare parts. Gold merchants played a critical portion in developing spare parts trade, leveraging their associations with Egyptian accomplices. Family and tribal associations were crucial in the rapid development of this emerging trade, advancing from casual moment operations to organized forms. High-profit edges quickened development, coming about in a gigantic increment in commercial foundations to 9238 by 2016, and the starting of the city's specialization in car and truck save parts exchange. The vital area of the city within the heart of eastern Algeria, its vicinity to major high-density populace centers like Constantine, Batna, and Setif, alongside the crossing point of essential transportation courses and the improvement of national street systems, all contributed to its surprising commercial development. Because of these combined variables, Ain Mlila risen as a key commercial center for car save parts, picking up noteworthy significance at both national and universal levels in discount and retail exchange for this segment. Amid its later commercial advancement stage, the city experienced an phenomenal financial boom. This period was characterized by gigantic development in local commercial movement, went with by a nonstop deluge of dealers from over Algeria, especially within the car save parts space. This relocation, which included shippers from neighboring cities and indeed removed locales like Oued-Souf and Oran, further cemented the city's status as a comprehensive national commercial center. Commercial development was strikingly reflected within the considerable increment of commercial foundations, coming to 16791 areas by 2020, with a clear focus on save parts exchange. This enormous development, backed by inexhaustible capital and the city's vital area, driven to enhancement and extension of commercial activities over different divisions, counting investment, service, and industrial domains.¹

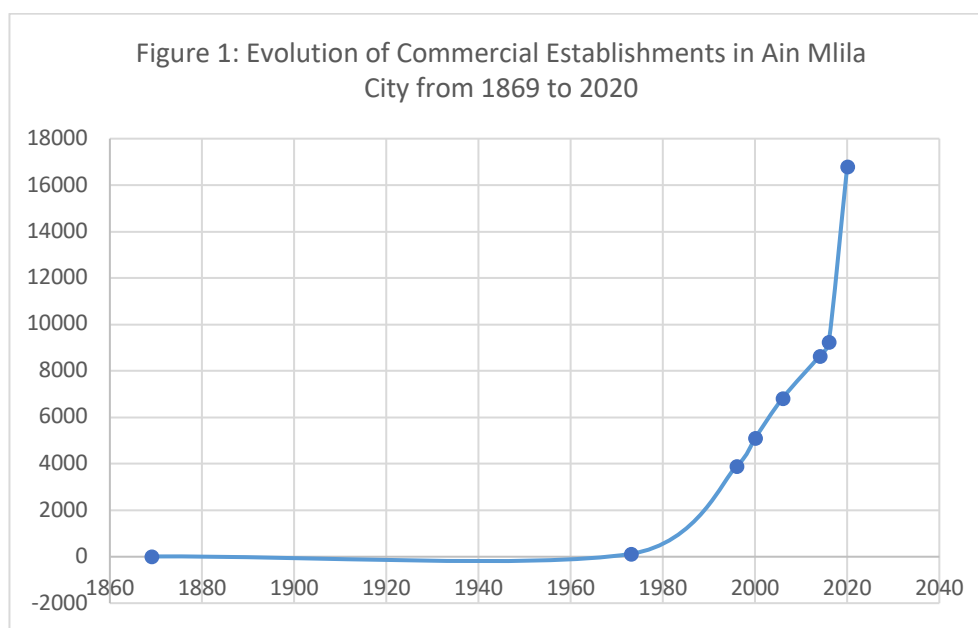
Ain Mlila, the second most populated city in Oum El Bouaghi province, representing a unique version of financial and business dynamics in east of Algeria. It boasts a huge personnel with inside the business zone, with 42% of its general personnel hired in exchange. This excessive percent displays the pivotal position of the economic zone with inside the metropolis's financial system and residents' lives, forming the spine of neighborhood financial activity. According to the 2020 statistics from the National Statistics Office's financial survey of Algerian cities, Ain Mlila's business shape is characterized with the aid of using awesome range and excessive density of business establishments. Automotive and truck spare elements exchange predominates,

¹ Statistics on the number of commercial establishments are extracted from the archives of the Directorate of Commerce and the Commercial Registry of Oum El Bouaghi Wilaya for the year 2022

with the metropolis's business cloth comprising 16791 business locations. Among these, retail investors represent the huge majority, with 9226 investors, highlighting the significance of retail exchange with inside the metropolis's day-by-day financial movement.

Source: Data from the Commercial Directorate of Oum El Bouaghi Wilaya

In addition, it hosts 734 business enterprises, overall associated with automobile spare elements, indicating a big business base that helps and enhances the economic activity. Additionally, 515 wholesale investors play a essential position in deliver chains and wide-scale products distribution. A unique characteristic of Ain Mlila is the presence of 572 importers, with over 80% working with inside the automobile spare elements zone. This massive variety of importers has substantially superior the metropolis's reputé as an vital countrywide business center, demonstrating its openness to international markets and capacity to deliver various merchandise to satisfy neighborhood and nearby marketplace wishes. Furthermore, the metropolis consists of 1853 business carrier providers, indicating the improvement of exchange-associated offerings throughout numerous domain names together with transportation and storage. This range in business shape and its density, at the side of the advent of a specialized exchange in automobile and truck spare elements, has substantially superior the metropolis's business weight and its role with inside the eastern region of Algeria. These mixed figures spotlight Ain Mlila's strategic significance as a number one business center, able to assembly numerous countrywide marketplace wishes in a constantly developing zone. The metropolis is not always simply a colorful neighborhood marketplace, however extends its importance as a nearby exchange and distribution hub, with the capacity to hook up with worldwide markets via import activities.



This various and strong business infrastructure paperwork a stable basis for the metropolis's financial system, presenting more than one possibilities for increase and improvement. It displays the metropolis's potential to evolve to financial adjustments and meet evolving marketplace demands, making it a version of neighborhood financial improvement in Algeria.

A field study we conducted in the city of Ain Mlila reinforced the analytical data in an attempt to understand the relationship of the commercial dynamics with the urban growth in the city and the spatial changes occurring in it, confirming the extent of diversity in the available commercial activities, as well as the existing commercial specialties, in addition to the distribution of shops and commercial activities geographically, and the strength of the commercial attraction in the city, addressing the areas of commercial concentration and its accompanying spatial and demographic implications, as the study showed the reality of the distinct and varied geographical composition of the origins of traders in Ain Mlila, where local traders constitute the largest percentage by 60% of the total number of traders.

On the other hand, traders from other municipalities of the state and nearby cities within 100 km from Ain Mlila come in second place by 23%, which indicates the extension of commercial activity across a wider regional scope that reflects the importance of the city of Ain Mlila and its commercial status within its territory, but what draws attention is the presence of 17% of traders coming from distant regions and from different parts

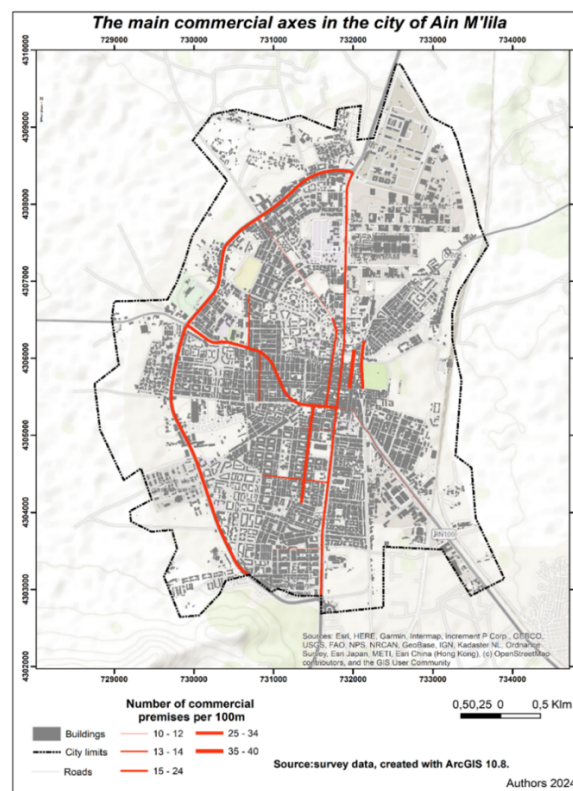
of the country such as the valley, Oran, Bejaia and Tebessa, who chose to settle their commercial activity in the city, which indicates the attractiveness of Ain Mlila as an important commercial center that attracts traders from multiple regions. This has turned it into an active economic hub in Eastern Algeria.

As for the residence of traders, the study shows that 85% of traders reside within the city (60% of traders from the city and 25% from geographical origin outside the city), which is an important percentage that reflects the great and distinctive commercial attractiveness of the city on the one hand and the deep connection between traders and their economic environment, which was confirmed by traders during the study and constituted a major factor in attracting them and establishing their commercial presence in the city.

The results of the study confirmed the importance of the commercial sector in the city in terms of labor distribution, where the number of workers in the shops ranged between one and twenty workers, depending on the nature of the commercial activity and the abundance of customers, which contributes to providing job opportunities in the city and reducing the unemployment rate.

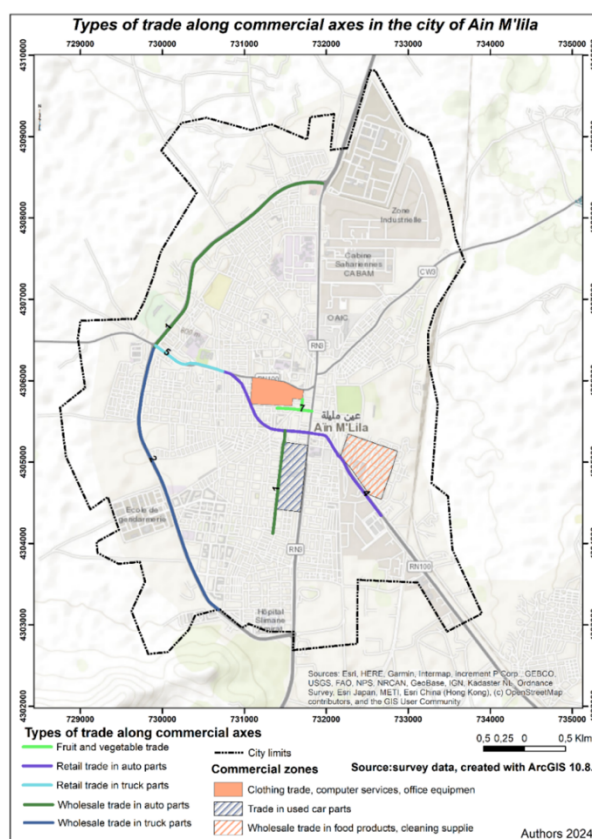
The study also revealed a diverse composition of commercial activities, with spare parts trade covering 44.3%, followed by food trade at 30.3% (wholesale 42.3% 55.7% retail), then clothing and footwear trade at 19%, while the rest of the types of trade were about 7.9%, so it can be said that the results reflect the city's specialization in spare parts trade with the rapid rise of food trade. As for sales patterns, commercial practices were distributed between retail sales by 49.4%, wholesale sales by 28.2%, and semi-wholesale sales by 22.4%.

The study also revealed the dynamism of commercial activity, as 47.7% of traders own shops in other areas, and 65.7% of them confirmed that trade helped them expand into other investment projects, which confirms that trade in the city of Ain Mlila is an important economic engine, which confirms the ability of local commercial activity to generate good income and create various economic opportunities for workers, especially since the commercial attraction coefficient in the city is 4.92.¹ We also conducted a spatial analysis study on the distribution of commercial activities in the city by studying the most important commercial axes and their density, as we can distinguish between major axes with high and very high commercial density (35-40 stores/100 m) and (34- 25 stores/100 m). 25 shops/100 m), (**Map 02: The main commercial axes in the city of Ain Mlila**), and others are mainly represented in the western part of the extension of National Road No. 100 from its intersection with National Road No. 03 to the western entrance of the city at a distance of 1915 m, the western bypass road at a distance of 5350 m, as well as part of National Road No. 03 and the two parallel roads from the east and west sides with distances ranging from 400 m to 1200 m. We can distinguish between major axes with high and very high commercial density. We also find some other active axes, but with medium or lower density (24-15 shops/100 m) and (14-10 shops/100 m).



¹ A field study on the commercial structure of the city of Ain Mlila 2024.

(Map 03: Types of trade along commercial axes in the city of Ain Mlila).



We also looked at the distribution of commercial specialties and areas of commercial concentration in the city. We found that while there are a variety of commercial patterns in the city, the wholesale and retail trade of new and used car and truck spare parts dominates it.

This shows how city merchants specialize in this type of trade, creating axes and areas specialized in particular items, as shown in Map 04; in addition to the axes of the trade of car and truck spare parts divided by specialties and types of vehicles on major roads, as previously mentioned, we have three specialized areas in the city: the first is in the wholesale trade of food and cleaning materials. Wholesale business situated beside the lovely vista and on November 1. While the third area specializes in the sale of ready-made clothing, office equipment, and technology and is situated in the city center, the second area deals with the trade of used spare parts and is situated in the urban sectors of the lovely view and November 1st.

This comprehensive development has strengthened Ain Mlila's position as an integrated commercial center, combining specialization in a specific sector with diversity in other sectors, reflecting the city's ability to adapt to changing market requirements and take advantage of its strategic location to enhance its economic growth.

2. Ain Mlila's demographic development: Contributing elements and geographical impacts.

Based on data from the Municipality of Ain Mlila's Civil Status Department and the National Bureau of Statistics, the analysis of the city's demographic evolution for the year 2021 showed that the city experienced a complex and dynamic demographic path, evolving from a small rural community to a vibrant urban center. The city began as a modest population base of 5063 inhabitants in 1954, with an urban concentration index that did not exceed 30.33%, reflecting its rural character at the time, to the emergence of an urban agglomeration whose features appeared immediately after that year. Because the length 1954-1966 witnessed a speedy and considerable populace boom of 18.75% in keeping with year, pushed via way of means of a big rural exodus after independence, accomplishing a populace of 16452 people. This boom changed into followed via way of means of a considerable growth with inside the city attention index to 49.64%, indicating the start of the city's city transformation. During the Nineteen Seventies and 1980s, populace boom endured at a speedy pace, accomplishing 8.98% in 1977 and 4.14% in 1987, bringing the populace to 47983. During this length, the city attention index endured to upward push to 69.49%, similarly reinforcing the city's city character. The

new 1988-1998 length noticed a slowdown with inside the populace boom rate, losing to 2.67% in 1998 and 2.49% in 2008.

However, the population continued to rise to 88441 in the same year, and the urban concentration index continued to rise to 73.91%. In recent years (2008-2020), the city experienced a slightly improved population growth rate of 2.49%, exceeding the national average of 1.9%, reaching a population of 116641 in 2020. More importantly, the urban concentration index reached 91.45%, which confirms the completion of the city's urban transformation and the consolidation of its position as an important urban center in the region, and this development can be explained by several overlapping factors:

- **Economic transformation:** With the end of the state monopoly on foreign trade in 1991, the role of private importers emerged in revitalizing the trade movement. These traders, whether as individuals or as family businesses, were able to take advantage of market opportunities and improve the purchasing power of consumers.

- **Trade globalization:** The city transformed from a local commercial center to a link with the global economy, as its merchants developed relationships with institutions and suppliers from around the world, making them regularly travel to Asia, Europe, the Middle East, and Asia to supply goods.

- **Trade specialization:** The city's activity evolved from general trade to specialization in specific sectors, especially the trade of car and truck parts, which enhanced its attractiveness as a regional and national trade center in this category.

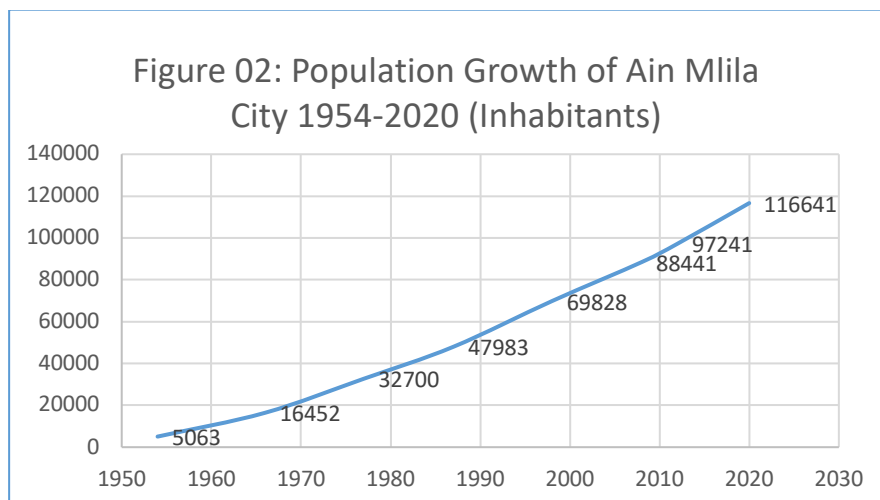
- **Family and social role:** It was an important factor in this development, as family and tribal networks contributed to accelerating the pace of commercial growth, especially in the field of import and distribution, this social dimension distinguishes Ain Mlila's experience from other commercial cities in the region.

The town of Ain Mlila embodies an incorporated version of city improvement in Algerian cities, in which demographic, financial and social elements are intricately and harmoniously intertwined.

During the length from 2008 to 2020, for example, the town finished a great populace leap, transferring from 88441 to 116641, a complete growth of 28200 inhabitants, a substantial demographic increase that manifested itself in progressed dwelling situations and best of lifestyles with inside the town.

The town recorded a solid herbal growth charge of 2766 humans according to year, supported via way of means of a excessive delivery charge of 3019 births according to year.

Commercial dynamism performed a pivotal position on this increase because the annual migration charge expanded from 207. This may be defined via way of means of the economic beauty of the town, whether within side the discipline of employment within side the business quarter or within side the agreement of stores from different cities, whose proprietors come to the town due to its business specialization and looking for earnings and extra possibilities for achievement.



Source: National Bureau of Statistics 2008 + Civil Status Department of Ain Mlila Municipality 2021

From the analysis, it could be stated that the name of the game of the achievement of Ain Mlila's enjoy is its capacity to mix more than one elements: Strategic location, awesome business specialization within side the discipline of vehicle parts, and robust social networks, which contributed to the presence of extra than

16791 stores in 2020, ensuing within side the introduction of an appealing financial surroundings for citizens from special states of the country, which contributed to the transformation of Ain Mlila from a small town to an critical local business center, taking gain of its openness to worldwide markets and its capacity to evolve to fast financial transformations.

Table 1. Development of Ain Mlila from 1954 to 2020

Years	Population (Inhabitants)	Urban Concentration Index%	Population Growth Rate of Ain Mlila%	National Population Growth Rate%
1954	5063	30.33	-	-
1966	16452	49.64	18.75	2.8
1977	32700	55.88	8.98	3.9
1987	47983	69.49	4.67	3.06
1998	69828	72.62	4.14	3.02
2008	88441	73.91	2.67	1.6
2012	97241	88.08	2.49	2.0
2020	116641	91.45	2.49	1.9

Source: National Bureau of Statistics 2008 + Civil Status Department of Ain Mlila Municipality 2021

3. The urban development of Ain Mlila: Manifestations of commercial dynamism in spatial transformations

Based on the data of the facial plan for the development and reconstruction of the city of Ain Mlila and the reports of the technical department of the municipality, it can be said that since its establishment in its current form in 1869, the city of Ain Mlila has witnessed many urban developments and expansions (Map 04: urban expansion dates of Ain Mlila city), around the basic nucleus of the urban complex that was formed in the colonial period, where the importance of its strategic location on National Road No. 03 emerged as a pivotal factor in urban establishment, during the period between its inception and 1954, urban planning adopted the European model, and vital institutions such as the Irfan School, administrative center, church and hospital were established, which formed the backbone of the city.

Simple commercial activity played a pivotal role in attracting residents and stimulating the initial urban growth, as its area did not exceed 30.76 hectares, but with the beginning of the Liberation Revolution, and during the period (1954-1966), the city witnessed a major demographic shift driven by the colonial policies of concentration camps and the isolation of the revolution in the countryside from the people, neighborhoods emerged that were inhabited by locals such as the Duk and Mellah neighborhoods (formerly La Cité Pascal), these expansions continued with intensive rural migration, which led to an uncontrolled urban expansion.

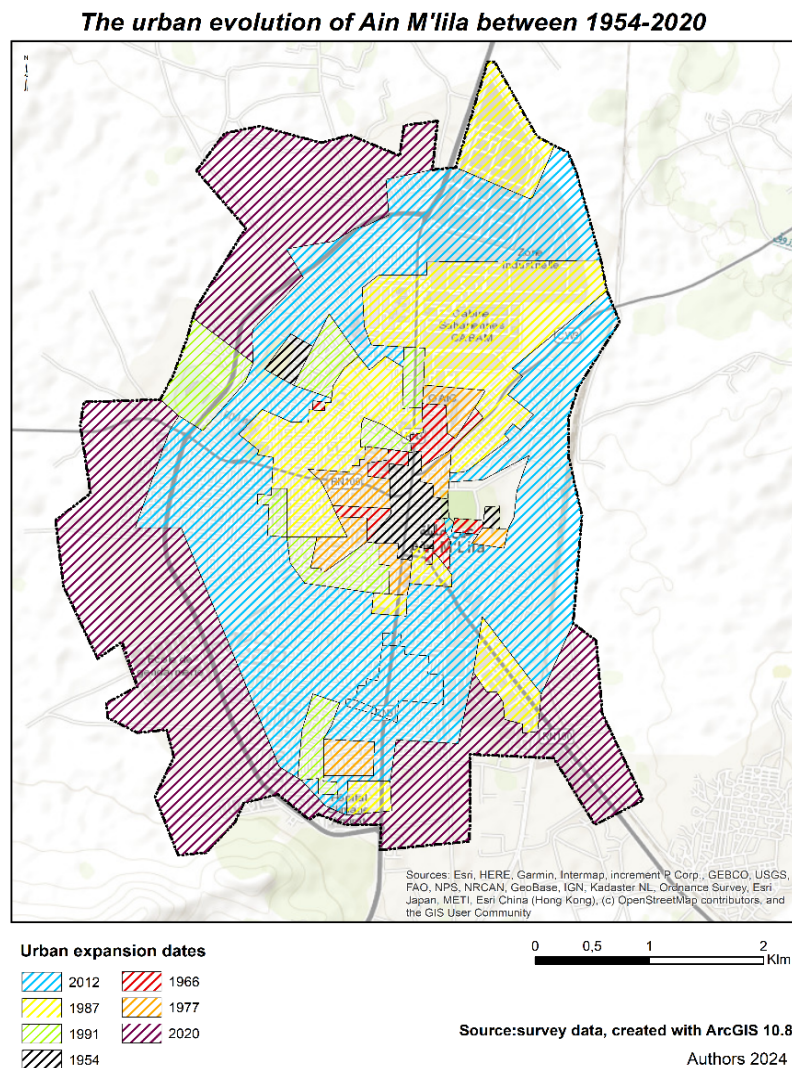
The promotion of the city to the status of a department that runs many municipalities in 1957 also contributed to its attractiveness and expansions in that period, and some commercial activities emerged, especially with the emergence of markets and simple commercial gatherings in the vicinity of the city, as the city extended over a real estate area of up to 72.37 hectares in 1966.

In the next phase (1966-1977), after independence, the city entered a new phase of thoughtful urban organization, where growth was subject to the directives of the local authorities, as the cattle market was established, which became an important economic center for the region, in addition to the construction program of 360 houses with centralized expansion in the western and northern regions. The city consumed a real estate area of 62.10 hectares to reach an area of 134.47 hectares in 1977, with a focus on organizing the urban fabric and connecting commercial areas to residential areas.

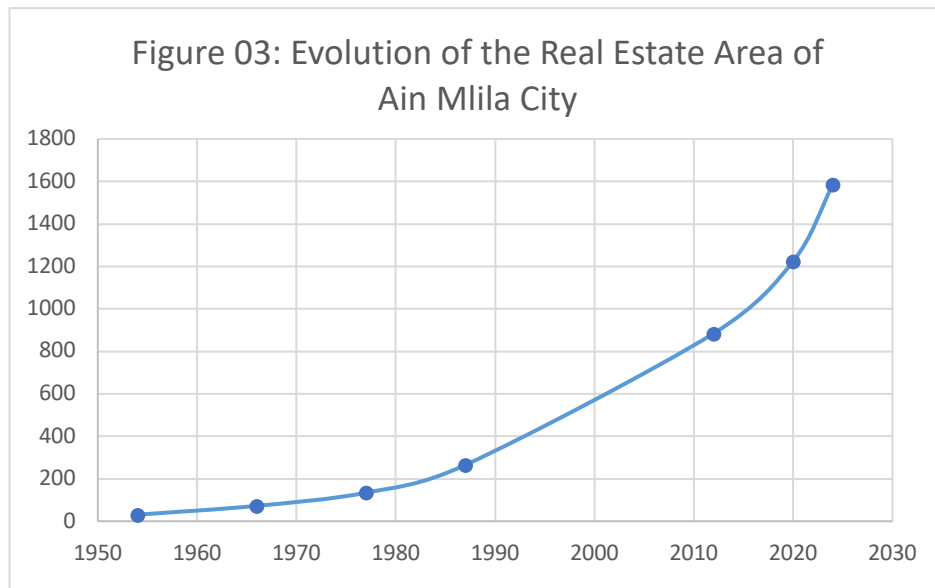
Between 1977 and 1987, this phase marked an important economic and urban transformation, with the localization of industry in the northern and eastern part of the city, especially the CABAM prefabricated building factory, which promoted rural migration and the need for expansion, so the city benefited from the ZHUN policy and 900 housing units were built, and new commercial activity areas appeared, which enhanced the commercial dynamics and created new economic opportunities, and vital facilities such as the hospital and the training center were established, and the real estate area consumed in 1987 reached 264.84 hectares.

With the beginning of the urban explosion and urban integration phase (1987-2012), urban expansion reached its peak with the emergence of a new urban area with 6379 dwellings Individual construction and commerce, especially in the new expansions across the three quarters of the First of November quota, and the establishment of an activity and storage area in the eastern side, bringing the total real estate area consumed to 884.37 hectares in 2012.

The city continued its urban expansion significantly and rapidly in the period after 2012 until the present time, with a focus on strategic planning, as major expansions appeared in the southwest of the city in the new urban pole, as well as a group of residential projects in the Ragaizi neighborhood and Merjet Bakha, and the two industrial zones and the activity area also witnessed expansions, and the urban expansion reached about 700 hectares, bringing the consumed real estate area to 1224.17 in 2020 and 1584.68 hectares currently, which manifested itself in a remarkable increase in residential, industrial and service areas, as an activity zone was established on an area of 48.29 hectares, and the commercial function, especially the auto parts trade, contributed to the increase in expansions at a very rapid pace.



Throughout these stages, the urban expansion of the city was characterized by focusing on both sides of National Road No. 03, National Road No. 100 and the western bypass road. These expansions were always driven by an important commercial dynamic that was reflected in the urban space, which was reflected in the great urban growth of Ain Mlila associated with commercial growth.



Source: *Ain Mlila Municipality Urbanization and Development Master Plan 2008 + Ain Mlila Municipality Technical Department 2021*

Analysis of the results.

Through the results of the study, it can be said that the city of Ain Mlila represents an exceptional model in exploiting its geographical features as an engine of economic and social development, as it is a distinguished example to study the relationship between commercial dynamism and demographic and urban growth, as its historical status and strategic geographical location as a strategic node in the urban network of Eastern Algeria played an important role in making it a vital and dynamic commercial center, which opened new horizons for development in various fields (economic, social and urban), which contributed to its transformation from a traditional transit point.

The field study showed the coincidence and compatibility of urban expansion and demographic growth with the development of commercial activity, as new expansions through different stages, especially after the economic opening in the early 1990s, witnessed the emergence of many shops characterized by both specialization and diversity, which created a high commercial density in areas specialized in certain types of trade and in the main road axes, which added great dynamism to the city, and also revealed an integrated development path that reflects the deep correlation between commercial activity and population growth in the city, as the city started from a modest commercial base that included only 12 shops.

Statistical records indicates a non-stop upward push within side the city awareness index, which reached 91.45%, with the metropolis's populace increase price in current years (2.49%) exceeding the countrywide average (1.9%), which confirms the metropolis's demographic and monetary attractiveness, this non-stop increase is in particular associated with geographical elements and industrial dynamics that shaped a populace enchantment issue that contributed to the metropolis's transition from an insignificant rural middle to an critical city and industrial pole.

The metropolis went from a modest actual property place of 30.76 hectares in 1954 to 1,224.17 hectares in 2020, accomplishing an annual city growth price of 23.3%. The vehicle mobile elements exchange shaped the spine of this increase, supported with the aid of using the metropolis's strategic place on countrywide roads and its proximity to predominant towns in Eastern Algeria.

The industrial dynamic performed a pivotal function in city growth, contributing to the advent of latest hobby zones and the growth of residential and commercial areas. The statistical have a look at the use of SPSS found out a robust correlation among industrial and populace increase within side the metropolis of Ain Mlila, because the statistical signs confirmed deep indicators of the metropolis's monetary transformation.

The correlation coefficient recorded a cost of 0.90, a ratio that displays a very robust tremendous correlation among industrial and populace increase. This manner that the growth within side the range of stores become at once observed with the aid of using an growth within side the range of residents, which confirms the natural correlation among industrial and demographic hobby within side the metropolis. The coefficient of dedication become 0.8092, which interprets that 80.92% of the modifications in populace may be defined with the aid of using industrial growth. This excessive percent shows that industrial increase become the primary

driving force of populace increase within side the metropolis. The population per 100 commercial establishments has dropped dramatically, from 42192 inhabitants in 1869 to just 694 in 2020.

This significant decrease reflects a significant expansion of commercial activity compared to population growth, and indicates the city's transformation from a lower-class social center to a bustling trading city. The statistical significance level is 0.037, which is less than 0.05, confirming the high statistical significance of the results. This means that the relationship between trade and population growth is not just a coincidence, but also the result of complex economic and social processes.

Statistical studies reveal a close relationship between the growth of trade and urban expansion in the town of Ain Mlila, and many indicators pinpoint this dynamic. The correlation coefficient was 0.981, indicating a very strong positive correlation between the number of shops and the city's real estate area. This means that business growth is always accompanied by a direct and significant expansion of the city. The coefficient of determination of 0.962 confirms that 96.2% of the change in real estate area can be explained by business growth, indicating that business activity is the main driving force behind urban expansion. The statistical significance level was a very low value of 0.0001, confirming that the relationship between business growth and urban expansion is not a coincidence, but the result of complex economic and social processes. The real estate area index per 100 shops was 150.95 hectares, reflecting the densification of real estate associated with business growth. Therefore, it can be said that the city of Ain Mlila has undergone a unique economic and urban transformation, with commercial growth being the fundamental driving force behind urban expansion, with a strong direct relationship that is statistically significant

.The statistical study also reveals the deep relationship between population growth and urban expansion in the town of Ain Mlila, with many indicators accurately illustrating this dynamic relationship. The coefficient of determination recorded a high value of 0.965, indicating that 96.5% of the urban area changes can be directly explained by population changes. This means that there is a very close correlation between population growth and urban expansion.

The study of urban area per 10,000 inhabitants showed a notable development over different periods. In 1954, the area per 10,000 inhabitants was 60.76 hectares, which gradually decreased until 1977, reaching 41.13 hectares, and then increased again in 2020 to 104.96 hectares. The linear effectiveness rate recorded a value of 0.01088 hectares per inhabitant. This means that for every increase of 1,000 inhabitants, the city expands by approximately 10.88 hectares. This reflects a direct relationship between population growth and urban expansion. The statistical significance of the p-value less than 0.001 confirmed the significance of this relationship, indicating that Ain Mlila has experienced a unique urban transformation with a strong positive correlation between population growth and urban expansion, with high statistical significance.

Conclusions.

Ain Mlila embodies a different version of city and financial transformation in Algeria, in which industrial dynamics served as a essential motive force of city increase. The town efficiently converted its strategic geographical area and industrial specialization in car spare components right into a complete financial and social appeal component, improving its function with inside the eastern Algerian region. The top-notch industrial expansion, manifested with inside the growth of industrial institutions from some dozen to extra than 16791 stores in 2020, brought about a thorough change with inside the town's city landscape. Commercial increase created an incorporated financial dynamic that contributed to the town's city and demographic expansion, reworking it from a small rural agreement to a colorful city middle.

Its populace elevated from 5063 population in 1954 to 116641 in 2020, pushed via way of means of a increase fee exceeding the country wide average, with an annual immigration of 350 people, and an growth with inside the city awareness index from 30.33% to 91.45%.

This is attributed to its cap potential to draw via an surroundings able to growing numerous activity opportunities, which superior its elegance and contributed to its non-stop demographic increase.

Ain Mlila's enjoy displays the cap potential of Algerian towns to leverage their geographical area, industrial specialization, and social additives as a essential component for nearby development. It is a vital nearby industrial middle that mixes specialization in particular industrial sectors and financial diversity, profiting from its openness to worldwide markets and its cap potential to evolve to unexpectedly converting financial variables.

This makes Ain Mlila a dwelling testimony to the capacity for a success transformation of small and medium-sized towns in Algeria, in which industrial dynamics served as an essential motive force of city increase, no matter several spatial demanding situations and financial changes.

REFERENCES

1. Gsell Stéphane (1929), "Ancient History of North Africa", Volume 8
2. Gsell Stéphane (1972). Archaeological Atlas of Algeria
3. Mohamed Ibrahim El-Mili (1980), Algeria in Light of History, Dar El-Baath Constantine
4. Pérenne, H. (1995). The City as a Product of Trade
5. Slimane Haddad (2008), Regional Planning and Strategic Locations
6. Benhamou, M. (2021). Economic Transition in Algeria: The Role of Trade
7. Brahim Benlakhlef and Pierre Bergel (2013), The "New Rich" of Globalized Trade and Their Role in Urban Transformation
8. El-Ghazali, M. (2019). Urban Challenges in Algeria: A Focus on Housing and Services
9. Pierre Bergel and Nadia Kerdoud (2010), New Commercial Spaces and Transformation of Consumption Practices in Algerian Cities.
10. Aoune Nouredine, (2012), Role of Commercial Structures in Urban Space Organization - Case of Batna City -, Doctorate in Urban Planning, Mentouri Constantine University.
11. Chibane Nacerdine, (1987), The Role of Commerce in Urban Structural Organization in Algeria: Case of Oum El Bouaghi Wilaya, 3rd Cycle Doctorate in Geography and Planning, University of Paris 1 Pantheon – Sorbonne.
12. Menasria Ouafa and Abbassi Samia, (2021), Commercial Dynamics as a Catalyst for Urban Development in Local Development Framework, Final Study Thesis, Oum El Bouaghi University.
13. Merzougui Amira, (2017), Relationship between Commercial Concentration and Urban Development: Case of Ain Mlila City, Final Study Thesis, Oum El Bouaghi University.
14. Civil Status Service of Ain Mlila Municipality (2023)
15. Commercial Directorate of Oum El Bouaghi Wilaya, Annual Commercial Activity Report (2022)
16. Commercial Registry Service of Oum El Bouaghi Wilaya (2022)
17. General Population and Housing Census, General Government of Algeria (1954)
18. Land Use Plan Review Report (04) and (05) for Ain Mlila Municipality (2014)
19. Local Economic Development Study, Strategic Studies Center (2022)
20. Monograph of Oum El Bouaghi Wilaya (2020)
21. National Statistics Office Reports (2022)
22. Technical Service of Ain Mlila Municipality (2023)
23. Urban Planning Guidance Plan for Ain Mlila Municipality (2008)
24. World Bank (2020). Trade and Economic Growth in Developing Countries