Feeding the City:
Agriculture and Urban Change in Istanbul from the Late Ottoman to the Early Republican Period

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The intellectual content of this dissertation, which has been written by me and for which I take full responsibility, is my own, original work, and it has not been previously or concurrently submitted elsewhere for any other examination or degree of higher education. The sources of all paraphrased and quoted materials, concepts, and ideas are fully cited, and the admissible contributions and assistance of others with respect to the conception of the work as well as to linguistic expression are explicitly acknowledged herein.

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Abstract

Feeding the City: Agriculture and Urban Change in Istanbul from the Late Ottoman to the Early Republican Period

Ayşe Nur Akdal, Doctoral Candidate at the Atatürk Institute for Modern Turkish History at Boğaziçi University, 2025

Professor Cengiz Kırlı, Dissertation Advisor

This study examines Istanbul's urban agricultural system, which has been almost completely erased from the city's life and memory, and its transformation from a social, economic, and environmental perspectives. As a first step, the study focuses on market gardens and examines the role of these agricultural units in supplying the city and their place in the urban metabolism at a time when transportation facilities were limited. After presenting a multidimensional picture of the city's ongoing agricultural system, the dissertation focuses on two periods that were crucial to its transformation: the late Ottoman and early Republican periods. The two main themes that link these periods are discussed throughout the dissertation and are expressed through the concepts of the “urban–rural relationship” and the “urban boundary”. The study focuses on the spatial impact of population growth and urban expansion in the late Ottoman period and analyses the active and passive roles played by market gardens, vineyards and orchards in land development. The problems caused by the physical expansion of the city during this period also led to efforts to draw a boundary around the city within the framework of modern administrative thinking. Throughout the study, the issue of urban boundaries is examined in relation to various factors such as food and housing prices, taxes, and a range of actors including the municipality, gardeners, and other food producers. With the early Republican period, the focus of research shifts to the new methods, opportunities and policies that began to be adopted in the production, distribution and consumption of fresh food. Although the question of defining the city's boundaries, a problem

inherited from the late Ottoman period, persisted during these years, the era was defined by official and public debates over whether Istanbul could be considered an agricultural city. In the early 1930s, the city had the potential to develop both industrially and agriculturally. However, developments after 1935 paved the way for the elimination of agriculture from urban space and daily life in Istanbul. The study examines the impact on this transformation of factors such as the introduction of modern management projects imposing hygiene and aesthetic standards, increased transport capacity and the expansion of scale of vegetable production and supply as a result of policy implementation, and the inability of growers to compete in these increasingly difficult conditions. This dissertation draws on three evolving and interrelated literatures: critical urban theory, urban ecology and urban environmental history. It aims to contribute to the above–mentioned areas of research by examining the intertwined dynamics of urban transformation and urban–rural relations from the perspective of Istanbul's history.

92,000 words

Özet

Kenti Doyurmak: Geç Osmanlı'dan Erken Cumhuriyet'e İstanbul'da Tarım ve Kentsel Değişim

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Profesör Cengiz Kırlı, Tez Danışmanı

Bu çalışma, İstanbul'un kent yaşamından ve hafızasından neredeyse tamamen silinmiş bulunan kentsel tarım sistemini ve bu sistemin dönüşümünü toplumsal, ekonomik ve çevresel açılardan ele almaktadır. İlk adımda, özellikle pazara yönelik üretim yapan sebze bahçelerine odaklanan çalışma, bu tarımsal birimlerin, ulaşım imkânlarının sınırlı olduğu bir dönemde, kentin iaşesindeki işlevini ve kent metabolizması içindeki yerini incelemektedir. Tezde, kentin süregelen tarım sistemi çok boyutlu olarak tasvir edildikten sonra, bu sistemin dönüşümü açısından kritik öneme sahip iki döneme, geç Osmanlı ve erken Cumhuriyet dönemlerine, odaklanılmaktadır. Farklı koşullara sahip bu dönemleri ilişkilendiren ve tez boyunca tartışılan iki temel sorunsal, "kent–kır ilişkisi" ve "kentsel sınır" kavramlarında ifadesini bulmaktadır. Çalışma, geç Osmanlı döneminde nüfus artışı ve kentsel büyümenin mekânsal etkilerine odaklanmakta ve bağ, bahçe ve bostanların arsa geliştirmede oynadıkları etkin ve edilgin rolleri analiz etmektedir. Bu dönemde kentin fiziksel olarak genişlemesinin yarattığı sorunlar, ona modern yönetim anlayışı bağlamında bir sınır koyma çabasını da beraberinde getirmiştir. Çalışma boyunca kentin sınırları meselesi, farklı problemler (gıda ve konut fiyatları, vergiler vb.) ve çeşitli aktörler (belediye, bahçıvanlar, diğer gıda üreticileri, vb.) ile ilişkisi içerisinde ele alınmıştır. Araştırmanın odağı, erken Cumhuriyet dönemiyle birlikte, taze gıda üretimi, dağıtımı ve tüketiminde benimsenmeye başlayan yeni yöntem, imkân ve politikalara yönelmektedir. Bu yıllarda, geç Osmanlı döneminden miras alınan kente sınır

çizme sorunsalı devam etmekle birlikte, döneme rengini veren, İstanbul'un bir tarım kenti olup olamayacağı hakkında yürütülen resmî ve kamusal tartışmalardır. Kent, bu dönemde hem sanayi hem de tarımsal anlamda gelişme potansiyeline sahiptir. Ancak, 1935 sonrası yaşanan gelişmeler, İstanbul'da kent içi tarımın kentsel mekandan ve gündelik yaşamdan silinmesine giden yolu açmıştır. Çalışma; hijyen ve estetik standartları dayatan modern yönetim projelerinin benimsenmesi, artan ulaşım kapasitesi ve uygulanan politikalar neticesinde sebze üretim ve tedarik ölçeğinin genişlemesi ve bahçıvanların giderek güçleşen bu koşullarla rekabet edememesi gibi olguların bu dönüşüme etkilerini çözümler. Bu tez, gelişmekte olan ve birbiriyle ilişkili üç literatüre; kritik kent teorisi, kentsel ekoloji ve kentsel çevre tarihine yaslanmaktadır. Birbiriyle iç içe geçen kentsel dönüşüm ve kent–kır ilişkisi dinamiklerini, İstanbul tarihi açısından inceleyerek adı geçen araştırma alanlarına katkı sunmayı hedeflemektedir.

92,000 kelime

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- English – Fluent
- French – Intermediate



To my brother, Ahsen

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Abbreviations and Acronyms

BOA	Başbakanlık Osmanlı Arşivi
BCA	Başbakanlık Cumhuriyet Arşivi
İBB	İstanbul Büyükşehir Belediyesi
TBMM	Türkiye Büyük Millet Meclisi

A Note on Transliteration

I used the simpliest form of Latinization in the transliteration of the Ottoman Turkish phrases and terms. I kept the place names as they appeared in the document. I translated specific institution and term names into English, but provided the original Turkish forms in parentheses when they first appear in the text.

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Lettuce as far as the eye can see. A shady pavilion on the right. A row of straw stools, water wheel creaking and turning. In the center of the pavilion, a large pool of freshly cut lettuce. Coarse bundles of straw are wrapped around the sides. This is the famous "küllü" garden of Yedikule. [...] Some 200,000 lettuce plants are planted each year in all of Yedikule's gardens. A quarter of them go to İzmit. [...] Despite the dust and dirt, the Yedikule gardens are one of the most popular recreational spots in Istanbul. [...] From time to time, evening visitors appear at the garden gates, bottles in hand. Some even bring gramophones. These people retire to a corner and enjoy themselves with fresh cucumbers and hearty Yedikule lettuce.

– Hikmet Feridun, *Akşam*, (May 20, 1934)

1

Introduction

In the twenty–first century, much food production is not directly linked to the point of consumption. People can acquire food that has travelled long distances without being involved in any part of its production or transport process, simply by buying it from distribution points (e.g., supermarkets) that are relatively close to their homes. However, this global system, which allows all types of food needs to be met quickly from the remotest corners of the world, comes with crises and certain costs, such as vulnerability of urban poor against food price inflation as well as supply shortages due to wars, pandemics, and natural disasters.[1] Ensuring food security, or the provision of healthy and affordable food, in cities, which are among the first and hardest hit in times of crisis, has therefore become one of the most pressing issues of recent times. However, the

1 There has been a growing body of research from different disciplines on the issues of food crises, urban development, and sustainability in recent years. For example, see. Alberto Zezza and Luca Tasciotti, "Urban Agriculture, Poverty, and Food Security: Empirical Evidence from a Sample of Developing Countries," Food Policy 35, no. 4 (2010): 265–73.; Marc J. Cohen and James Garrett, "The Food Price Crisis and Urban Food (In) Security," Environment and Urbanization 22, no. 2 (2010): 467–82.; M. G. Badami and Navin Ramankutty, "Urban Agriculture and Food Security: A Critique Based on an Assessment of Urban Land Constraints," Global Food Security 4 (2015): 8–15. For a comprehensive study of Istanbul's food policy from a historical perspective, see. Candan Türkkan, Feeding Istanbul: The Political Economy of Urban Provisioning (Leiden: Brill, 2021).

provision of food in urban areas is not only a contemporary issue; it is also a historical one.

The roots of the current food crisis can be traced back to the transformation of the urban–rural relationship brought about by technological developments and urban modernization. One of the drivers of this transformation was certain developments in science and technology throughout the nineteenth and twentieth centuries. In an era with inadequate transport infrastructure and refrigeration systems, the production, distribution and consumption of perishable foods (such as meat, eggs, milk, fish, fruit and vegetables) had to be local and rapid. This condition required an extensive and complex urban agriculture system to feed the cities. In particular, market gardens (*bostan*s),[2] which served multiple functions such as production and consumption, were quite common in cities. However, with the developments of the last two hundred years including urbanization, modernization, and industrialization, the urban agricultural system, which was essential for provisioning cities, began to change rapidly.

In this respect, Istanbul was no different from most cities in the world. Istanbul's agricultural system, which consisted of villages, farms, and market gardens that hosted seasonal laborers mainly from the Balkan provinces and played a crucial role in the city's food supply, gradually disappeared from the urban system and daily life. This system underwent a major transformation between the late nineteenth and the early twentieth centuries (1930s), coinciding with the transition from the late Ottoman Empire to the early Republican period. Since the dominant dynamics of this transformation were quite different in each period, this dissertation is presented in two main parts. Consisting of a total of five chapters, each part has a different chronological and thematic focus. As an overture, chapter 2 outlines the components of the agricultural system

[2] The term *bostan*, was typically used by the Ottomans to describe melon or vegetable gardens. It is likely that some fruit trees were also included. In this text I prefer to use the term "market garden" rather than "produce garden" or "vegetable garden" as the equivalent of *bostan* to highlight that the *bostan*s were engaged in market–oriented production.

in Istanbul during the relevant periods and shows how this system functioned within the city's metabolism, particularly in the eighteenth and nineteenth centuries. Covering the late Ottoman period, chapter 3 and 4 focus on urban growth and planning. They examine urban transformation through its legal and administrative dimensions, and consider market gardens, vineyards and orchards as elements of this multifaceted process. Meanwhile, chapters 5 and 6, which focus on the early Republican period, thematically explore urban agriculture and the food system in a city that had lost its former status after the World War I. These chapters also explore the dynamics that led to the radical transformation of this traditional system.

The driving force behind the transformation that took place in the late Ottoman period was rapid population increase, the housing problem, and the demand for accommodation created by urban expansion. By the end of the nineteenth–century, Istanbul's population exceeded one million, with an influx of immigrants from the lost territories. In particular, the western outskirts of the city was the area that absorbed successive waves of immigration from the Balkans. The region, which experienced dramatic population growth, also witnessed industrial development alongside agricultural activity. The dynamism and expansion on the western edge of the city raised questions about where the urban boundary began and ended, and how it could be defined. In a city surrounded by market gardens, vineyards and orchards, it was necessary to determine whether these agricultural areas belonged to the city or to the countryside. In this respect, a conflict of jurisdiction arose from different views and policies on the measures to be taken for urban growth, as the Municipality, with its limited powers and budget, had begun clashing with various state institutions (such as the Council of State, the Ministry of Interior, etc.). Meanwhile, beyond formal resettlement, market gardens and farms within the city were either occupied by immigrants or divided into building plots by their owners, often through partial abuse of the legal framework. The urban growth experienced during this period, in all its dimensions (especially in terms of public health, urban hygiene, and transportation infrastructure), placed a heavy burden on the already

budget–constrained municipality. At the same time, authorities began to intervene, albeit hesitantly, in the urban fabric through modern standards and planning, regulating infrastructure and public health. In parallel with these developments, the authorities actively addressed aspects of urban agriculture that posed risks to public health and safety, framing them as issues consistent with the modern urban planning principles of the time. However, due to budgetary constraints, policies that could provide definitive solutions to the sanitation problems caused by urban agriculture were not implemented. These problems associated with the city continued into the early republican period.

After nearly a decade of wars (the Balkan Wars, World War I, and the War of Independence), occupations, and population exchanges, the Republic was founded in 1923, marking the establishment of a nation–state. This ushered in an era of the faster, more centralized implementation of radical policies. After losing its status as the capital and nearly half of its population, Istanbul experienced radical changes in its urban agricultural system, especially in the 1930s, when the foundations of the Republic were being firmly established through reforms. Agricultural activity was still being carried out in the city, which retained a semi–rural character, and there was potential for further development, as the newspapers and periodicals of the time were filled with articles on the subject. The issue of producing and distributing fresh food in the city was of great importance in the period between the two world wars, when inflation and the cost of living were soaring. However, despite the clear potential of urban agriculture, as will be seen in later chapters of the study, the fresh food system experienced radical disruption for a number of reasons. The expansion of the local fresh food system, driven by improved transport facilities, has also played a role.

The starting point of the dissertation is to examine the structure and transformation of Istanbul's agricultural system, to analyze the dynamics that drove its transformation in the late nineteenth and early twentieth centuries, and to link them to their contemporary echoes in today's urban–rural relations. These dynamics include top–down projects, but also bottom–up processes and structural conditions that are separate for each

period. For example, while population growth was a pressing issue in the late Ottoman period, the halving of the population in the early Republican years after the war became a major concern. These are discussed throughout the dissertation from two perspectives: (1) urban transformation (including its metabolic and physical dimensions), and (2) urban–rural relationship (including issues related to urban boundaries and scale). In this regard, the overture chapter focuses on the elements of Istanbul's agricultural system and how they functioned within the urban metabolism in the eighteenth and nineteenth centuries. In the late Ottoman period, the focus is on the administrative, legal and illegal dimensions of the land development process, examining agricultural units such as market gardens, vineyards and orchards as both active and passive subjects of this process. In the early Republican period, on the other hand, the focus is not on urban space but on the agricultural potential of the city in terms of production, distribution and consumption. It focuses on the high cost of living, the adoption of new methods and technologies, and the integration of new production areas into the system. In this way, it addresses the transformation of the agricultural system and the shift of fresh food production to a larger scale. Ultimately, this dissertation aims to provide a comprehensive panorama of Istanbul's agricultural system and its transformation, examining it alongside the changing urban–rural relationship in the context of the conditions of the period. In this context, the following research questions are expected to be explored in the dissertation.

- Chapter 2: What were the components of the agricultural system in Istanbul and how did they function within the city's metabolism?
- Chapter 3: How did urban growth, driven by intense immigration from the lost territories in the second half of the nineteenth century, affect urban space and agriculture?
- Chapter 4: How did the process of land development take place, both legally and illegally? What role did market gardens, vineyards and orchards play in this process? Which actors and processes shaped the definition of urban boundaries, and in what ways?

- Chapter 5: How was the agricultural potential of Istanbul assessed in the early twentieth century? How did modern institutions, such as the central vegetable market, and new transport policies, such as the reduction of railway tariffs, influence urban–rural relations and rescale vegetable cultivation, distribution and consumption?
- Chapter 6: How did top–down processes (such as transport policy, modern hygiene, and aesthetic standards), conjunctural factors (such as the high cost of living and water scarcity), and bottom–up processes (such as the lack of organization among gardeners) affect the urban agricultural system in the early twentieth century?
- The overarching question of the dissertation: How did the socio–economic and political context of the late Ottoman and early Republican periods affect the agricultural system and urban–rural relations using of Istanbul?

This study proposes two hypotheses that address these research questions with regard to two successive historical periods.

In the late nineteenth–century, the influx of immigrants resulting from the loss of large territories dramatically increased the demand for food and housing. Most of the newly arrived immigrants settled on farms on the outskirts of the city, which later developed into neighborhoods and villages. Istanbul's “urban area” expanded into the “rural” or “suburban” areas with the rapid urbanization trend that accelerated in the last quarter of the nineteenth–century. In addition, the growing population stimulated the housing market, and some of the agricultural land within the city was subdivided and converted into building plots. However, the main growth during this process was outward rather than inward. There were two reasons for this: first, the settlement of immigrants, especially in the western periphery of the city; and second, the tendency of residents within the municipal boundary to move out of the city due to the high cost of living, taxes, hygiene, and security issues. This rapid urban expansion led to debates among administrative authorities about where the urban–rural boundary began and ended, as well as conflicts over jurisdiction.

In the early twentieth century, particularly during the 1930s, the city had nearly halved its population and lost its status as the capital. During the interwar period, it faced a high cost of living. The authorities adopted various policies and began implementing measures to reduce food prices. The pros and cons of the existing urban agriculture system emerged as a topic of public debate. The components and roles of this system were widely discussed. However, the priorities and perspectives of the state during this period were different. The difficulties faced by gardeners, railway policy, modern hygiene and aesthetic standards all contributed to the radical transformation of the long–established urban agricultural system. Improvements in transport, both technological and political–economic, caused a significant shift in spatial and temporal scales, reforming the relationship between urban and rural areas.

§ 1.1 Concept in Context: A Review of Literature

This dissertation is framed by a theoretical orientation towards interrelated bodies of urban studies literature, such as critical urban theory, urban ecology and urban environmental history. Despite the significant thematic overlap between these fields of study, it is rare to find research that integrates them in the existing literature. Drawing on these subfields, this study contributes to the literature by developing a synthesis of these fields through the example of changes in Istanbul's agricultural system and urban–rural relationship during a period of transition from empire to nation–state in the late nineteenth and early twentieth centuries. In this regard, a number of concepts borrowed from different disciplines, such as "urban agriculture", "food system", "urban metabolism", "urban boundary", "urbanization", "the question of scale", and "urban–rural relationship", are reassessed through the example of Istanbul.

Urban agriculture, both a historical phenomenon and a practice that varies according to historical and spatial conditions,[3] refers to the cultivation of fresh food in and around urban areas, closely linked to the socio–economic and ecological systems of the city and part of its

[3] In Ottoman Istanbul, for example, the blurred division between urban and rural, commercial and manufacturing functions led to overlaps and functional ambiguities between regions. lt was an "open" city with no clear boundaries between rural and urban areas. See. Maurice M. Cerasi, *Osmanlı Kenti: Osmanlı İmparatorluğu'nda 18. ve 19. Yüzyıllarda Kent Uygarlığı ve Mimarisi* (İstanbul: Yapı Kredi Yayınları, 1999), 80–81, 214, 225. The distinction between urban and rural areas was not so clear–cut and included certain complementary elements on the outskirts of the city, such as market gardens and fields. The neighborhood unit, in which houses were grouped, was typically surrounded by urban spaces such as clusters of trees, orchards, and market gardens. Urban population growth was accommodated by converting gardens into building plots. The relatively outer neighborhoods of the city were surrounded by a transitional zone of agricultural activity that separated the city from the countryside. The vineyards, orchards, and market gardens located in these zones, as well as in the city center, served both the food and recreational needs of the city. See. Uğur Tanyeli, "Anadolu ve Türk Kentinde Fiziksel Yapının Evrim Süreci (11 –15. yy)" (Phd diss., İstanbul Teknik Üniversitesi, 1987), 161; Mustafa Cezar, *Anadolu Öncesi Türklerde Şehir ve Mimarlık* (İstanbul: İş Bankası Kültür Yayınları, 1977), 89; Cerasi, *Osmanlı Kenti*, 71, 97, 102, 205; A. Kemal Aru, *Türk Kenti* (İstanbul: Yem Yayınları, 1998), 12–13. Fatma Acun, "A Portrait of the Ottoman Cities," *The Muslim World*, no. 92 (2002): 268; Mustafa Sabri Küçükaşçı, "Şehir," *İslam Ansiklopedisi,* vol. 38 (İstanbul: Türkiye Diyanet Vakfı, 1988–2014), 441–446. The Ottoman city was not a clearly defined entity, either physically or administratively. Its borders remained indistinct. The city was often more than just the nefs–i şehir. It was originally complemented by *fina*, meaning courtyard, which served as a transition point between the "city" and the "non–city." It served as a bridge between the settled urban area and the open rural hinterland. In general, the fina, which was laid out as a green belt around the city with vineyards and market gardens, referred to places where the nefs–i şehir could breathe. This area, which met the city's needs, also defined and completed it by establishing its boundaries. See. Turan Açık, "Osmanlı Şehri Neresi? Fıkhın Şehri Tanımlamada ve Finâ'nın Şehrin Sınırlarını Belirlemedeki Yeri," *Kadim*, no. 6 (2023): 77–106. In parallel, the qadi's authority, both as an administrative and religious figure, extended beyond the villages and neighborhoods surrounding the city to the districts outside nefs–i şehir. These areas included nearby plateaus, villages, and other lands that were vital to the city's economy, providing essential resources such as food and raw materials such as cotton, wool, and leather. Halil İnalcık, "İstanbul: Bir İslam Şehri" *İslâm Tetkikleri Dergisi (Review of Islamic Studies)*, no. 9, (1995): 221–242.

"metabolism".[4] The metabolism of some large cities such as Paris, London and Istanbul was disrupted in the nineteenth and twentieth centuries by rapid urbanization,[5] industrialization and modernization. In his later works,[6] Marx addresses terms such as soil fertility and organic recycling,

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4 The term "metabolism" dates back to the nineteenth century and was first used by biologists to describe the exchange of matter between an organism and its environment. See. Kristian Saguin, "Urban Metabolism," *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*, ed. Anthony Orum (Hoboken, NJ: John Wiley and Sons, 2019), 1–5. The term "urban metabolism", developed by Abel Wolman to refer to the processes and transformations of socio–ecological change, is used in various ways as a metaphorical, paradigmatic and methodological tool. See. Abel Wolman, "The Metabolism of Cities," *Scientific American* 213, no. 3 (1965): 179–190.

5 The "urban" and its relationship to the "rural" is a topic that is discussed in the literature from different perspectives. While classical sociologist and historians have dealt with the concept of the "city", it has generally been defined as a non–agricultural area, and the "urbanite" is described as a person whose livelihood does not depend on agricultural production, in the newly emerging literature (such as critical urban theory and urban environmental history) it is evaluated as a relational process and called "urbanization". They have described urbanization, which has accelerated with the development of capitalism since the nineteenth century, as a "process" rather than a "thing". Neil Brenner and Christian Schmid's pioneering work has been of particular importance in opening new ways of thinking. See. Neil Brenner and Christian Schmid, "Elements for a New Epistemology of the Urban," in *The SAGE Handbook of the 21st Century City*, ed. Suzanne Hall and Ricky Burdett (London: SAGE Publications, 2017), 47–67. For further reading see. Neil Brenner and Christian Schmid, "Planetary Urbanization," in *Urban Constellations*, ed. Matthew Gandy (Berlin: Jovis, 2011), 10–13; Neil Brenner and Christian Schmid, "The 'Urban Age' in Question," *International Journal of Urban and Regional Research* 38 (2014): 1–25; Neil Brenner and Christian Schmid, "Towards a New Epistemology of the Urban?," *City: Analysis of Urban Change, Theory, Action* 19, no. 2–3 (2015): 151–182; Neil Brenner, *New Urban Spaces: Urban Theory and the Scale Question* (New York: Oxford University Press, 2019); Brenner Neil, ed. *Implosions/Explosions: Towards A Study of Planetary Urbanization* (Berlin: Jovis Verlag, 2014).

6 John Bellamy Foster argues that often overlooked but significant elements of Marx's social theory provide a strong foundation for developing a robust environmental sociology. It is argued that Marx's systematic approach to nature and environmental degradation, particularly in relation to soil fertility, is inherent in his work and that the issue of ecological sustainability can therefore be interpreted from this perspective. John Bellamy Foster, "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental

drawing on the work of the German chemist Justus von Liebig. He identified the major ecological crises of his time, such as the problems of capitalist agriculture, soil fertility, and deforestation, by emphasizing the widening gap between humans and nature. He argued that the growing fertilizer industry and the changing soil chemistry driven by capitalist production intensified the "metabolic rift"[7] and pollution. Marx also highlighted how advancing transportation technologies allowed food[8] to be transported over long distances, leading to the depletion of essential elements from the soil. He also linked the failure to return waste to the soil to the modern sewage system, arguing that human waste should be returned to production as part of a complete metabolic cycle. This disconnect was also evident on a global scale, as colonized countries were forced to exploit the riches of their lands to support the industries of the colonizing nations.[9]

As cities grew, agricultural areas initially expanded on a regional scale. Later, advances in transportation technology and market economics led to the opening of new agricultural areas, and the food market expanded to national and global scales. As the first industrialized countries, England serves as a unique example and played a pivotal role in shaping the division of labor between industry and agriculture that became more pronounced in the second half of the nineteenth century. During this

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Sociology," *American Journal of Sociology* 105, no. 2 (1999): 366–405. For other authors who share the same point of view, see. Howard Parsons, ed., *Marx and Engels on Ecology* (Westport, Conn.: Greenwood, 1977); Michael Perelman, "Marx and Resource Scarcity," *Capitalism, Nature, Socialism* 4, no. 2 (1993): 65–84; Kozo Mayumi, "Temporary Emancipation from the Land," *Ecological Economics* 4, no. 1 (1991): 35–56; Michael Lebowitz, *Beyond Capital* (London: Macmillan, 1992); Elmar Altvater, *The Future of the Market* (London: Verso, 1993).

7 The concept of "metabolic rift" developed by Marxist socio–ecologists to understand how the expansion of capitalism (and consequently urbanization) disrupts the relations between urban and rural areas, as well as between human and non–human nature. This concept was developed in the context of Karl Marx's use of the term metabolism as a metaphor to describe the material transformation of both human and non–human nature during the process of social reproduction.

8 In the context of this dissertation fresh food, particularly vegetables.

9 Foster, "Marx's Theory of Metabolic Rift," 366–405.

period, technological advances in agriculture and transportation began to stimulate and transform different regions of the world in different ways. Both Eric Hobsbawm and Karl Polanyi link the process of food becoming a globally traded commodity to the development of cities.[10]

The land was a natural element deeply intertwined with human institutions, and its abstraction was perhaps one of the strangest acts ever performed by the humanities. Traditionally, land and labor were inseparable and closely associated with craft and cultural organizations. Before its economic function, land ensured the balance of human life; it was humanity's secure home and represented the landscape and the seasons. A key aspect of the utopian concept of the market economy was the separation of humans from nature and the organization of society according to the demands of the real estate market. Industrial capitalism, in France as in England, was particularly concentrated in rural areas, requiring regions where factories could be built and workers could settle. In the nineteenth century, almost all of these industrial cities faced significant demands for food and raw materials. The subordination of the land to the needs of industrial society occurred in several stages: the commercialization of land, with the proceeds invested in modern agriculture and industry; the increase in the production of food and organic raw materials to meet the needs of the rapidly growing industrial population at the national level; and the extension of this productive system to foreign countries and colonial regions. The division of labor to technological developments, and although land does not physically move, its products can be transported as far as transportation facilities and laws allow. In this way, the movement of goods partially offsets geographic advantages and disadvantages. In ancient or early medieval times, goods for daily use were not bought and sold on a regular basis. Surpluses of grain were used to

10 Eric J. Hobsbawm, *Industry and Empire: The Birth of the Industrial Revolution* (New York: The New Press, 1999).; Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time*, 2nd ed. (Boston: Beacon Press, 2001). For further reading. Carolyn Steel, *Hungry City* (London: Vintage Books, 2008).;Andrew Deener, *The Problem With Feeding Cities: The Social Transformation of Infrastructure, Abundance, and Inequality in America*, (Chicago and London: The University of Chicago Press, 2020).

meet the needs of the surrounding area, especially nearby cities. Until the fifteenth century, grain markets did not form an organized local structure. However, urban growth forced landowners to focus on producing for the market. In England, the development of the metropolis led authorities to relax regulations on the grain trade, allowing it to become, if not a national, then at least a regional commodity. Moreover, from the second half of the eighteenth century, the concentration of the population in industrial cities triggered the transformation of food into a commercial commodity, first at the national level and then at the global level. In this way, the division of labor between industry and agriculture spread across the globe.

High transportation costs and underdeveloped transportation technology prevented regular imports into industrialized countries until the late–nineteenth century. In the first half of the nineteenth–century, the organization and management of railroads began in the industrialized countries, especially in Britain, and by the second half of the century had reached extraordinary levels. This development stimulated trade in raw materials and food. In addition, the second half of the nineteenth–century saw a surge in scientific advances in agriculture. For example, the use of artificial fertilizers grew rapidly, with a patent for superphosphate granted in 1842, and imports of Peruvian guano to England soaring in the 1840s. These technological advances influenced the growth of British agriculture, which met the food needs of urban areas and the industrial sector. First, agriculture had a natural monopoly in the British market because high transportation costs made food imports almost impossible. But after the late nineteenth century, with advances in transport, agriculture lost its central role. Consequently, Britain needed to import large quantities of agricultural products from market countries to support its exports. Moreover, advances in transportation technologies, such as railroads and ships, transformed untouched regions into agricultural areas for market production. As these areas became fully operational, high production costs left governments no choice but to protect local farmers through high tariffs. While many European countries implemented these measures, Britain chose not to. Food imports into Europe and

overproduction in overseas regions caused a sharp drop in prices. British agriculture, which relied on a monoculture system based on wheat, was particularly vulnerable. Under these conditions, Britain shifted its focus from grain production to a more urban and profitable model of fresh food production. Advances in freezing and refrigeration technology from the 1880s onward enabled greater specialization in this production. For example, instead of producing lower quality meat, they began to produce higher quality meat. In addition, as the number of farms gradually declined, agricultural activity increased in market gardens and orchards on the outskirts of cities.

The "scale shift" from the local to the national and global, as discussed by Polanyi and Hobsbawm, has been explored theoretically by Marxist geographers such as Henri Lefebvre and David Harvey. Henri Lefebvre identifies two critical stages in the historical development of the city. In the first stage, the long–dominant agrarian structure (comprising production, rural life, and peasant society) was subjected to the reality of the city, first promoted and then destroyed by commerce and industry. In the second stage, where the "urban revolution" takes place, the dominant reality of the industrial city is subjected to its destructive dimension, namely rent. In other words, the exchange value of urban space becomes more dominant than its use value.[11] According to him, the concept of the "urban revolution" that emerged after the Industrial Revolution and spread globally after World War II marked the end of the "city" as the center of military, political, commercial, and religious functions that once distinguished it from the countryside. This end, however, does not refer to the physical destruction of the built environment, but rather to a shift in the centrality and transformation of the historic city driven by modernist and capitalist urbanization. For example, agricultural enterprises and old–style businesses that have existed since the manufacturing era are being tested, transformed, and reshaped within the urban fabric. In his view, the urban revolution has also transformed the urban fabric and

11 Henri Lefebvre, *The Urban Revolution*, trans. Robert Bononno (Minneapolis: University of Minnesota Press, 2003).; Henri Lefebvre, *Writings on Cities*, ed. and trans. Eleonore Kofman and Elizabeth Lebas (Oxford: Blackwell, 1996).

urban–rural relationships. The term “urban fabric” no longer refers strictly to the area created within cities, but encompasses the totality of indicators of urban dominance over the countryside, such as the presence of urban elements in rural areas. In this case, the boundary is not between the "urban" and the "rural," but rather between the dominated periphery and the dominant center. Lefebvre argues that this domination reinforced rather than eliminated the contrast between the city (center) and the countryside (periphery). In this conflict, the “city” continues to exploit its advantage of domination. This conflict, which is part of the social division of labor, can also be observed on a global scale. Lefebvre explains the dominance of the city over the countryside with the concept of “implosion/explosion”.[12] This concept describes the peripheralization that results from the excessive concentration of activities and human mobility within the city. This marks the beginning of the process by which rural areas are transformed into urban areas, as mentioned above.

Paris provides a compelling example of the changing relationship between urban and rural areas.[13] In the mid–nineteenth century, production in Paris began to rely more on exchange value, which subsequently led to improvements in the physical conditions of communication and transportation capacity. As transportation capacity and conditions improved, Paris moved away from its reliance on locally grown produce and became increasingly dependent on goods from the countryside and abroad. This shift led to a real revolution in consumption. By the 1870s, the market gardens, orchards, and livestock that once thrived in the city had largely disappeared. The bourgeoisie could now expect fresh vegetables from Algeria, while the poor supplemented their meals with potatoes from the west and turnips from the east. The process of

12 The concept of "implosion/explosion", introduced in the last quarter of the twentieth century by Henri Lefebvre and further reinterpreted by Neil Brenner and Christian Schmid. They emphasize that in the twenty–first century, urbanization has reached planetary proportions. They inflate the argument to its limits, contending that there was no longer any “non–urban” or “rural” area in the world that was not dominated by the urban.

13 David Harvey, *Paris, Capital of Modernity* (New York and London: Routledge, 2003).

suburbanization began to draw even more distant rural areas into the maelstrom of Parisian life. The incorporation of the suburbs into the urban framework by the French statesman and urban planner Haussmann played a significant role in the expansion of land development systems that had stagnated in earlier periods. The increase in land and property rents served to allocate land use according to capitalist logic. Uses that could not sustain profitability, such as agriculture and recreation, were gradually pushed out of the city to make way for more lucrative uses. Industry, in turn, was forced to seek cheaper land on the periphery of the city or land with special advantages, such as proximity to transportation hubs, that justified paying higher rents. The removal of spatial barriers and the availability of fresh food from multiple sources, combined with improved distribution within the city, brought greater security to Paris' food supply. As economies of scale reduced the cost of transporting agricultural products, access to a variety of foods from different regions became easier.

The technological innovations such as transportation and communication that emerged in Europe and the United States not only spurred economic growth but also facilitated the physical transformation of cities.[14] However, urban growth and the physical transformation of urban space have not occurred everywhere in the same way or for the same reasons. In the case of Ottoman Istanbul, for example, it was not labor migration but the influx of immigrants from the lost lands, which led to rapid urban growth and spatial transformation. Nevertheless, such transformation in different cities could bring along similar contradictions. For example, as the population began to concentrate in cities throughout the nineteenth century, the demand for horses increased in areas such as construction, transportation, and manufacturing, due to the fact that mechanization of industries was limited. As a result, the number of horses in cities grew in parallel with the urban population. In addition, these horses were valuable not only for their labor but also for their

14 Martin V. Melosi, "Cities, Technical System and the Environment," *Environmental History Review* 14, no. 1/2 (1990): 45–64.

manure and other byproducts. A horse–based economy developed in the city, where the surrounding fields around cities were used to grow hay to feed horses, and these fields were fertilized with manure produced by the horses.[15] Similarly, dairy production and urban development in nineteenth–century New York State developed in parallel with the growing population. As the demand for milk increased, the production of perishable products, especially butter and cheese, became integrated into the process of urbanization and stimulated the market. This process influenced the relationship between dairy products and urban markets as well as economic change.[16] As in all these cases, urban agriculture followed a dual trajectory shaped by urban rents and transportation facilities. As agricultural land in the city was converted to construction plots for rent, the production of fresh produce moved further out, made possible by developments in transport. In the nineteenth century, for example, one sixth of the total land area of Paris (13.3 square kilometers) was devoted to market gardens, which not only provided fresh food for the city but also offered a creative solution to the problem of excess animal manure. It rapidly declined, however, as motor vehicles replaced horses and urban rents rose.[17] The ways in which this process occurred varied from city to city based on its topography, location, and transportation capacity. This meant that the city was growing through untapping "rural" capacity that had not been utilized before. For instance, Chicago's city–building process was made possible by the organization of agricultural activities and transportation in its hinterland, treating the city and its rural surroundings as an interconnected whole. It was driven by the expansion of economic activities such as agriculture, ranching, and forestry in the

15 Clay McShane and Joel Tarr, *The Horse in the City: Living Machines in the Nineteenth Century* (Baltimore: The Johns Hopkins University Press, 2007).

16 Eric Brunger, "Dairying and Urban Development in New York State, 1850–1900," Agricultural History 29, no. 4 (October 1955): 187–99.

17 Gerald Stanhill, "An Urban Agro–Ecosystem: The Example of Nineteenth Century Paris," Agro–Ecosystems 3 (1977): 269–84.

surrounding rural areas.[18] In the nineteenth century, infrastructural and environmental interventions, such as establishing networks to connect the district to clean water sources, played a significant role in establishing Pera as one of the most cosmopolitan and affluent districts in Ottoman Istanbul. Kasımpaşa, however, a working–class district within the same administrative boundaries, was unable to benefit from these developments. Its lower topographical position exposed it to sewage discharged from Pera into the river, which was used to irrigate market gardens, thereby contributing to the spread of epidemic diseases.[19]

In the nineteenth–century onwards, some cities in Europe and America began to grow in parallel with their capacity to transform (urbanize) rural areas. In parallel with the increase in urban rents, rural elements within the city (market gardens, dairies, etc.) began to change as far as transport technologies allowed. This dissertation explains how the "transformation" that some metropolises such as New York, Paris and London underwent gradually throughout the nineteenth century occurred more abruptly and perhaps more radically in Istanbul in two successive periods corresponding to the late Ottoman and early Republican years. To explore the particularities of Istanbul's change, the dissertation presents in Chapter 2 how the urban agricultural system functioned within the metabolic processes of the city throughout the eighteenth and nineteenth centuries. This chapter singles out market gardens as the representative spaces of urban agriculture. These gardens played a key role in the functioning of Istanbul's urban metabolism, by providing inputs

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18 William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton & Company, 1991); Richard S. Hopkins, *Planning the Greenspaces of Nineteenth-Century Paris* (Baton Rouge: Louisiana State University Press, 2015). For a critique of William Cronon's theoretical framework, see. Brian Page and Richard Walker, "Nature's Metropolis: The Ghost Dance of Christaller and Von Thunen," *Antipode* 26, no. 2 (1994): 152–162.

19 K. Mehmet Kentel, Assembling 'Cosmopolitan' Pera: An Infrastructural History of Late Ottoman Istanbul (PhD diss., University of Washington, 2018).; K. Mehmet Kentel, "Pera, Kasımpaşa, Sewers, and Maps: Representing Infrastructural Entanglements in the Nineteenth-Century Istanbul," Journal of the Ottoman and Turkish Studies Association 8, no. 1 (2021): 405–14.

such as food, water and fuel, and by processing outputs such as sewage and waste. Later, Chapters 5 and 6 revisit the conceptual framework of metabolism only to show how the implementation of modern sanitation policies and development of transport technologies during the 1930s contributed to the deepening of the metabolic rift that separated urban–rural relations, as well as the expanding boundaries that are shaped by such relations. What expands here, these chapters argue, is not simply the administrative or physical boundaries of the city, but rather the rural area over which the city exerts influence on. In other words, these two chapters argue that a shift of scale characterized the change of Istanbul's agricultural system during the 1930s.

On the other hand, Chapters 3 and 4 deal with urban–rural relations on a smaller scale, focusing on physical dimensions of the urban space. In the context of the late nineteenth century Istanbul, where the city experienced extreme growth in both population and physical terms in a very short time, the question of urban boundary transpired about how to constrain or limit the city's administrative borders vis-à-vis the rural areas in its immediate surroundings. Importantly, the question of where the city begins and ends was not unique to Istanbul; it was also a major issue in this period for western European cities, which had been undergoing rapid growth throughout the nineteenth century because of immigration induced by economic and other reasons. In the case of Istanbul, the drive behind the efforts to delineate "the urban" stemmed from multiple difficulties the Ottoman administration had to face, such as increasing food demand, rising land rent, budgetary constraints, and urgent needs to increase tax income. Chapters 3 and 4 provide examples of radical changes in the perceptions of space and its boundaries in this period when modern urban management and planning methods began to be adopted to address these difficulties. The focus here is on the expanding boundaries of the city, driven by population growth and the influence of land values.

§ 1.2 A Review of Studies on Istanbul's Agriculture

Istanbul's urban history has generally been discussed through its built environment. In addition, the food infrastructure of Istanbul as an Ottoman capital has been studied, particularly in terms of grain and meat procurement. In this respect, Istanbul's agricultural system has been almost completely neglected in the relevant historical literature. From a historical perspective, agriculture in Istanbul has been studied largely by historians working on the ancient period.[20] On the other hand, there are a few studies that contribute to the historical literature on either the Ottoman or the Republican period. In her work on grape and wine production along the Bosporus in the eighteenth century, Suraiya Faroqhi emphasizes the importance of examining how the food and drink needs of Istanbul's population shaped the city's natural environment.[21] Using vineyards in Paris as an example, she examines how gardens developed and transformed into public parks as the city expanded. She also notes that little research has been conducted on this topic. In another paper, Faroqhi attempts to evaluate Istanbul's urban agricultural areas in the seventeenth and eighteenth centuries through the lens of Johann Heinrich von Thünen's model of agricultural land use.[22] Similar to Faroqhi, I studied urban agriculture during the same period for my Master's thesis. I analyzed and mapped the general structure of Istanbul's market gardens, focusing on their locations, sizes, and ownership, as well as the profile of

20 For example, see. Henry Maguire, "Gardens and Parks in Constantinople," *Dumbarton Oaks Papers* no. 54 (2000): 251–264; John L. Teall, "The Byzantine Agriculture Tradition," *Dumbarton Oaks Papers* no. 25 (1971): 33–59; J. Koder, "Fresh Vegetables for the Capital," in *Constantinople and Its Hinterland: Papers from the Twenty-Seventh Spring Symposium of Byzantine Studies*, ed. Cyril Mango and Gilbert Dagron (Oxford, 1993), 49–56.

21 Suraiya Faroqhi, "18. Yüzyılda Boğaz'da Üzüm ve Şarap Üretmek: Domenico Sestini'nin Tanıklığı," in *İktidar ve Tohumları: Osmanlı Çevre Tarihi Üzerine İncelemeler*, Onur İnal and Yavuz Köse (İstanbul: İletişim Yayınları, 2019), 83–107.

22 Suraiya Faroqhi, "Supplying Seventeenth and Eighteenth Century Istanbul with Fresh Food," in *Nourrir les Cites de la Mediterranee: Antiquite–Temps Modernes*, ed. Brigitte Marib and Catherine Virlouvet (Paris: MMSH and Adrien Maisonneuve, 2003), 273–301.

the labor force, including hometowns, marital status, and age.[23] My thesis examines issues relating to the food supply, urban–rural relations, and the division of labor along ethnic and religious lines in Ottoman Istanbul. Drawing on archival sources, including previously unpublished materials such as population registers, it provides an overview of market gardens. Using archival materials, Aleksandr Shopov and Ayhan Han, in their article focusing on the Yedikule gardens, emphasize that the existing wells, water reservoirs, and other structures in these gardens provide comprehensive and observable insights into Ottoman agricultural technology.[24] The authors argue that the distribution and expansion of agricultural land within the city can be observed by tracing the properties of waqfs, drawing a comparison using the example of the Hagia Sophia waqf. Arif Bilgin emphasizes the importance of market gardens in supplying Ottoman Istanbul in his article based on court records.[25] He provides unique information about the physical characteristics of Istanbul's market gardens and the products grown in them. In another article, Aleksandr Shopov discusses how market gardens in early–modern Istanbul were an essential element of the urban environment.[26] According to Shopov, these gardens of Istanbul are not marginal or incidental parts of urban land use, but rather the foundation of the social and ecological formation of the early modern city. In his study, Ayhan Han examines the relationship between the city walls and the market gardens, highlighting the use of the moats as agricultural production areas to prevent the removal of stones from the walls and construction within the moats.[27] Suna Kafadar

23 Ayşe Nur Akdal, Market Gardens and Gardeners of Ottoman Istanbul (İstanbul: Libra, 2017).

24 Alexandar Shopov and Ayhan Han, "Osmanlı İstanbul'unda Kentiçi Tarımsal Toprak Kullanımı ve Dönüşümleri: Yedikule Bostanları," *Toplumsal Tarih*, no. 236 (2013): 34–38.

25 Arif Bilgin, "Osmanlı Dönemi İstanbul Bostanları (Bir Giriş Denemesi)," *Yemek ve Kültür*, no. 20 (2010).

26 Alexandar Shopov, "When İstanbul Was a City of Bostan: Urban Agriculture and Agriculturist" in *A Companian to Early Modern Istanbul*, ed. Shirine Hamadeh and Çiğdem Kafesçioğlu (Leiden, Bostan: Brill, 2021).

27 Ayhan Han, "İstanbul ve Galata Hendeklerinde Kentsel Toprak Kullanımı," *Tarih Dergisi*, no. 64 (2016).

explains how Yedikule lettuce, an endemic plant of Istanbul, acquired its "legendary" character.[28] In her study, she examines Yedikule lettuce from various perspectives and contexts, drawing on a range of archival sources. By tracing a local product, her work provides unique insights into the urban culture of the period. Other studies, while not directly related to the urban agriculture theme, overlap with it. These include works on the gardens, studies on the food culture of Istanbul during the Ottoman period, with a special focus on palace cuisine;[29] research on the art and landscape architecture related to the gardens of Istanbul;[30] and studies on the agricultural areas of the city during the Republican period.[31]

Although each of the aforementioned studies provides valuable information, their scope remains somewhat limited and fragmentary about the history of agriculture in Istanbul. In this respect, there is no comprehensive published work that examines the structure of urban agriculture or its transformation in the city. The scarcity of secondary sources on Istanbul's agricultural system represents not only a rather unexplored field, but also a significant gap in the literature. In addition to the other contributions outlined below, this dissertation also aims to serve as a reference work in this regard.

§ 1.3 Significance of the Study

The study focuses on Istanbul's agricultural system and its transformation in the late Ottoman and early Republican periods. In order to analyze a "system" and its transformational dynamics, this research requires a multi-layered investigation spanning various levels of

28 M. Suna Kafadar, *Yedikule Lettuce as Urban Legend: Environmental Imaginary of Istanbul in the Early Twentieth Century* (Master's Thesis, Boğaziçi University, 2019).

29 For example, see. Arif Bilgin, *Osmanlı Saray Mutfağı 1453-1650* (Kitabevi, 2004).

30 For example, see. Nurhan Atasoy, *A Garden for the Sultan: Gardens and Flowers in Ottoman Culture* (İstanbul: Aygaz, 2002); Gönül Aslanoğlu Evyapan, *Eski Türk Bahçeleri ve Özellikle Eski İstanbul Bahçeleri* (Ankara: ODTÜ Mimarlık Fakültesi Yayınları, 1972).

31 For example, see. Paul J. Kaldjian, "İstanbul's Bostans: A Millennium of Market Gardens," *Geographical Review* no. 94 (2004): 284–304.

examination. These include human and non–human actors, social classes, economic structures, legal and administrative frameworks, historical events, modes of production, transportation technologies and conjunctural changes. Consequently, constant engagement with these levels and the relations between them is necessary. This is because what is in question is not solely a spatial transformation, a change of urban land use, or just the absence of market gardens in contemporary Istanbul. Rather, the themes of the dissertation are the gradual disappearance of a once functional system that was embedded in the socio–economic structure, metabolic cycles, and daily life of the city; various causes and conditions that led to its eventual absence; and its replacement in different forms.

In addressing this multilayered subject, concepts from various disciplines, such as urban theory, urban ecology and urban environmental history, are employed. These concepts serve as tools for individual chapters and overarching frameworks that support the study as a whole. In this sense, the research is inherently interdisciplinary. It considers "urban agriculture" as a system, embedding it within the urban metabolism, and traces its historical transformation over a relatively long period, focusing on different points in time in the case of Istanbul. As such, it shares significant similarities with the transformations that have occurred or are occurring in cities in other regions, while at the same time tracing the idiosyncratic dynamics unique to Istanbul from the late nineteenth to early twentieth centuries.

Although there are some exemplary publications on the emerging field of urban environmental history, especially regarding the urban agricultural structures of Istanbul in different periods of its history, no previous research on the city has brought together these fields or the different levels analyzed in this dissertation in such a comprehensive manner. Above all, the contribution of the study to existing literature lies in its ability to weave together different threads of historical change in land use, urban agricultural structure, food system, and metabolic processes of Istanbul. At the theoretical level, the study draws upon several concepts and interrelates them in exploring different aspects of the same historical process. For instance, the emerging field of urban environmental

history is rarely associated with urban agriculture. Yet urban agricultural areas are crucial elements in the functioning of urban metabolism, providing food for city dwellers (including animals) and absorbing their waste. This dissertation, particularly Chapter 2, examines Istanbul's agricultural system and its prominent components through such an association of concepts. Similarly, although there are an extensive theoretical literature in urban studies regarding urban–rural relations, urban boundaries, and the question of scale, these issues have not been sufficiently explored from a historical perspective. In chapters 5 and 6, the dissertation examines the dynamics of how Istanbul's demand for fresh food during the early Republican period began to be met at different scales, in parallel with the development of transportation technology. These dynamics highlight shifts in urban–rural relations that began to change at the turn of the century and are among the factors that contributed to the disappearance of Istanbul's agricultural areas. Another novelty the study brings forth relates to Istanbul's urban history per se. Istanbul produced much of its fresh food in urban agricultural areas, giving the city a semi-rural landscape. However, the spatial characteristics and transformation processes of these "rural" elements, which have left significant traces on the urban fabric, have not been adequately explored in the literature on Istanbul's urban history. In chapters 3 and 4, the dissertation follows these traces back to the nineteenth–century and explain the beginnings of the century–long story about the disappearance of agricultural areas and activities from the face of urban landscape. In line with these, the dissertation makes significant contribution to the research on Istanbul in that it introduces new historical documents and data that have not been presented before.

§ 1.4 Methodology

This dissertation lies at the intersection of critical urban theory, urban ecology and urban environmental history in the academic literature. The rich conceptual frameworks used in these fields approach the city not as a fixed, static or closed space, but as a dynamic system of passive and

active relationships. Some of the concepts discussed in the literature review include urban metabolism, metabolic rift, urban growth, urban–rural relationship and the scale question, among others. It will contribute to this body of literature by focusing specifically on the urban agricultural system and its transformation through the example of Istanbul.

For obtaining data, I drew upon both primary and secondary archival sources. In this regard, I consulted the Ottoman Prime Ministry Archive of the Republic of Turkey (T.C. Başbakanlık Osmanlı Arşivi) as the main archive for both the Ottoman and Republican periods. I also visited the Istanbul Metropolitan Municipality (İBB) Archive and the Turkish Statistical Institute Archive. I used guidebooks such as Mecelle–i Umur-u Belediyye and Düstur and searched the newspapers and magazines of the time such as Servet–i Fünun, Akşam and Cumhuriyet. I analyzed information from the publications of various institutions such as Istanbul Şehremaneti Mecmuası, Istanbul Belediye Mecmuası and Demiryollar Dergisi. I benefited from the reports of the Agricultural Congresses of 1931 and 1938. I also prepared tables and maps based on the data collected for the dissertation.

§ 1.5 Dissertation Outline

The dissertation is divided into two parts, both chronologically and thematically. Before moving on to these parts, the dissertation begins with an overture chapter to understand what exactly is being transformed. Part I (chapters 3 and 4) examines the urban growth, which led to demands for food and housing, and the mechanisms put in place to meet and regulate these demands in the late Ottoman period. Part II (Chapters 5 and 6) looks at the potential of Istanbul's agricultural system following the First World War, and at the radical changes it underwent, particularly after the mid–1930s.

The first chapter, Chapter 2, serves as an overture, descriptively examining the Istanbul's agricultural system and its human and non–human components within the broadest possible spatial and temporal framework. The chapter emphasizes how Istanbul's natural features,

such as the Bosporus and the Golden Horn, have shaped the city's topography, climate, and urban settlement patterns. On the basis of ten registers dating mainly from the eighteenth and nineteenth centuries, it analyses the factors that influence the location, number and size of the agricultural elements of the city, such as market gardens as spaces of production and consumption. The information on market gardens and gardeners recorded in these registers was organized into tables and maps. The chapter also examines the profile of the labor force working in these gardens and the challenges they face, such as travel restrictions, taxes, and other expenses, with a particular focus on seasonal migration. It also highlights the essential components of gardening know–how, technology, water and fertilizer to understand how a garden works. It explores the sources of water used in the gardens, including running water and wells; the role of animal labor such as horses, donkeys and mules; the use of technology such as waterwheels and wells; and the importance of manure in gardening and the growing issue of waste management in the city.

Chapter 3 examines the phenomena of immigration and urban growth and the two interrelated problems they created: food and housing. The chapter focuses temporally on the late nineteenth century and spatially on the western outskirts of Istanbul. It examines the process by which people migrated in large numbers to urban spaces, especially state-owned lands (*miri arazi*) and farms, after losing their lands in wars, particularly in Eastern Thrace and the Caucasus. It examines the emergence of new neighborhoods and villages in these areas. It also reviews reports by local and foreign experts on how to increase the region's agricultural production. It also looks at planned and existing industrial investments in the area. Although, initially conceived as an agricultural extension of the city, the chapter demonstrates that the region gradually developed a more fragmented and heterogeneous character, incorporating industrial and residential zones. Finally, the chapter discusses how urban growth in this direction reshaped perceptions of Istanbul's boundaries and the debates it sparked among various stakeholders.

Chapter 4 examines the increase in legal and illegal construction in urban areas, as well as the attempts to control the city’s unplanned

growth. A central theme is the recurring tension between de facto urban developments and de jure regulations, which is illustrated through various examples. The analysis begins with the case of the Balmumcu farm, which was situated within the designated development zone and was "occupied" by immigrants. It then examines the government's response, including its concessions and regulatory actions. The chapter also assesses the influence of the 1858 Land Code on illegal land production and its connection to uncontrolled urban growth. Furthermore, it considers whether market gardens within the city were regarded as "private property" eligible for conversion into building plots or as "semi-public spaces" intended for recreation. It demonstrates how some market garden owners exploited legal loopholes to convert their land for building while evading their responsibilities. Finally, the chapter discusses the limited provision of municipal services in an increasingly fragmented city, with a focus on sanitation issues relating to water sources and gardens.

The second part begins with Chapter 5, which analyzes Istanbul's fresh food system in the 1930s, focusing on the production, distribution, and consumption of perishable foods. The chapter provides an overview of Istanbul's socio-economic and political landscape during the 1930s, highlighting debates about the city's agricultural potential as it sought to define its identity. It incorporates the opinions of prominent thinkers and newspaper columnists. The chapter then explores the areas of Istanbul where the cost of living was most pronounced and examines the relationship between urban growth and food supply. Attention shifts to street vendors as a key element of food distribution, addressing their role in mitigating the effects of high living costs and contributing to the city's food network. To better understand the relationship between production and distribution mechanisms, the chapter also analyzes the construction process of a modern, centralized vegetable market and its impact on the city's food system. Finally, it discusses the implementation of new transportation policies and plans aimed at revitalizing the fresh food trade and their influence on urban–rural relationship.

The final chapter examines the radical transformation of Istanbul's traditional agricultural system, which had sustained the city for almost a

thousand years, but which underwent significant changes from the mid-1930s onwards. It explores the challenges gardeners faced in a competitive environment, the impact of new transport policies, the effects of modern hygiene standards introduced in response to epidemics, and the consequences of the emerging urban aesthetic perspective on market gardens within municipal boundaries.

2

Overture: A Panorama of Istanbul's agricultural system

Above all, the transformation to be examined in this study relates to the impact and extent of the gradual decline of agricultural activities in Istanbul. This process of change had distinct effects on multiple layers, including, but not limited to, the socio–economic structure of the city, its spatial form, and the ecosystem in and around it. To make the implications clearer, in this chapter I will take a rather broad perspective, both in terms of time and space, and outline the general background in which such structures and forms took shape. I call this background the "urban agricultural system" of Istanbul, a term that refers to the totality of cultivated land (especially market gardens, but also vineyards, orchards and farms), labor (gardeners, day laborer, etc.), agricultural know-how (irrigation, fertilization techniques, etc.), vegetable markets and bazaars, infrastructure (transport, sewage systems, etc.), inputs (water, manure, seeds, etc.) and animals (used for their manure and labor, among other things).

This chapter presents a comprehensive yet detailed panorama of this system until the mid–nineteenth century. Istanbul's agricultural system, which included many human and non–human elements, was one of the

most important components of its metabolic process.[1] Based on Ottoman archives and secondary sources, mostly written by contemporaries, the chapter first examines the topography of the city and its relationship with other natural elements that formed the basis of the urban and agricultural infrastructure. It then focuses on the market gardens, which served as spaces for production, consumption and recreation. The market gardens played a key role and were the main spaces where urban life and agriculture intertwined. Therefore, the characteristics of gardens such as their distribution in the city, their size, and the different roles they played in everyday life are explained. The analysis then shifts to the expertise of those who ran these gardens. Exploring their labor profiles, working conditions, and production methods, it will be shown that their work was closely integrated into the socio–economic fabric of the city. Finally, the chapter turns to the non–human components of Istanbul's agricultural system, i.e., water sources and technologies, types of fertilizer, and the role of animal labor.

§ 2.1 Istanbul: A City Shaped by Nature

Istanbul consists of three regions formed by the Bosporus, the Golden Horn (considered an extension of the Bosporus), and the Sea of Marmara. Its natural boundaries extend to the Black Sea in the north, the Kocaeli Mountains in the east, the Sea of Marmara in the south, and the Ergene Basin in the west. However, for many years, the urban settlement area was limited to two control points on land: Bostancı in the east and Küçükçekmece in the west. What makes Istanbul magnificent, unique and shaped by nature is the combination of rare geographical features such as the Bosporus and the Golden Horn with its distinctive fauna, flora and topography. (Figure 2.1.).

[1] As discussed in the Introduction, urban metabolism corresponds to the cycles of resource use (such as food, water, and energy) in the city in terms of inputs and outputs.



Figure 2.1 The location of Istanbul.[2]

The Bosporus, which flows through Istanbul like a great river, is undoubtedly the city's most defining feature, dividing it into two halves. The sixteenth–century French natural historian Petrus Gyllius considered the Bosporus to be a more significant and influential force than Byzas, the legendary founder of the city, claiming that the city's existence would be unthinkable without the Bosporus beneath it.[3] The Bosporus, which connects the Black Sea to the Sea of Marmara and separates the Asian and European continents, extends from the northernmost points at the Anatolian and Rumelian lighthouses to the southernmost areas near Sarayburnu (Seraglio Point) and Salacak (Maiden Tower).The remarkable difference in length between the east coast (35 km) and the west coast (55 km) is due to the numerous bays on the west side, including the Golden Horn.[4] The Florentine botanist Domenico Sestini, who lived in the eighteenth–century, offered a narrower view of the Bosporus. According

2 I would like to thank my friend and colleague, Murat Tülek, once again for visualizing and mapping the data collected for this dissertation.

3 Pierre Gilles, *İstanbul Boğazı* (İstanbul: Eren Yayınları, 2000).

4 Sedat Bornovalı, *Boğaziçi'nin Tarih Atlası* (İstanbul: Timaş Yayınları, 2018), 14.

to him, the Bosporus began at the vineyards of Kadıköy (Khalkedon) on the eastern side and Tatavla (San Dimitri) on the western side and extended to the Anatolian and Rumelian lighthouses on both shores.[5]

The Bosporus region, neither entirely mountainous nor completely flat, is characterized by numerous valleys separated by streams and rocky hills that rise stretching perpendicularly from the sea. These hills are composed of limestone, silica sand, and occasionally quartzite rocks. Some hills are higher because quartzite is more resistant to erosion than limestone. However, the soil structure, primarily made up of clay and limestone, is generally prone to erosion and movement by rainfall and streams. As a result, the region has a rolling landscape with gently sloping hills and streams running between them, rather than steep cliffs. These hills are divided by valleys, meadows, and stream mouths, while the alluvial material carried by the streams forms small alluvial plains. Coastal villages, built on alluvial soil at the mouths of streams, remained isolated for many years because of their location, bounded by streambeds and dense forests that limited restricted transportation options.[6]

Sestini notes that the yellow and red soils of the Bosporus are well suited for vine cultivation, which was already practiced to some extent in almost all the villages. Meanwhile, various other crops were grown in areas with black soil, which could be found in certain segments. In contrast, the limestone soils scattered throughout the region were relatively infertile.[7] He identifies the villages with the most vineyards as Ortaköy, Yeniköy, Tarabya, Büyükdere and Rumeli Feneri on the western side and Kadıköy and Üsküdar (Scutari) on the eastern side. However, he describes the soil along the Bosporus as unsuitable for growing cereals such as wheat, barley, and oats. Wheat was sown on small plots of land on hills

5 Domenico Sestini, *Boğaziçi 1779* (İstanbul: Kitabevi Yayınevi, 2022), 17.

6 Until the establishment of Public Steamship Company (Şirket–i Hayriye, 1851), transportation in the region was carried out by small rowboats or sailboats. However, sea transportation was challenging due to the Bosporus's complex and variable winds and currents. For this reason, this part of the city remained a low–density countryside (sayfiye) area for many years.

7 Ibid., 26–27.

exposed to the north wind and receiving limited sunlight. Although the climate was favorable for growing corn, it was only grown in limited quantities.

The north–south flow of the Bosporus creates a refreshing air corridor that moderates Istanbul's climate. As a result, the city enjoys a milder climate than many other settlements at the same latitude in Western Europe. The two dominant winds that affect the city are the northeast wind, known as *poyraz*, which blows from the Black Sea, and the southwest wind from the Sea of Marmara, known as *lodos*.[8] Sestini describes Istanbul's climate as mild and healthy, with the exception of the riverbeds, where there were distinct microclimates.[9] The city consisted of settlements located in the basins of these shallow, small rivers, which included valleys and slopes shaped by the flow of water. River basins, with their distinct natural, social, and physical characteristics, influenced neighboring basins and contributed to the formation of larger ecosystems. Each river basin had its own unique microclimate and natural identity.[10] In Istanbul[11], there were 168 river basins. 90 of these rivers were on the western side and 78 on the eastern side. Of these river basins, 62 flowed into the Black Sea, 53 into the Sea of Marmara, 42 into the Bosporus, 4 into the Golden Horn and 7 into Lake Büyükçekmece and Lake Küçükçekmece. (Figure 2.2)

8 Skarlatos Byzantios, *Constantinople I* (İstanbul: İstos Yayın, 2019), 61–71.

9 Sestini, *Boğaziçi 1779*, 27.

10 Ibid., 81.

11 The area referred to here is within the boundaries of the Istanbul Metropolitan Municipality (5,461 km^2).

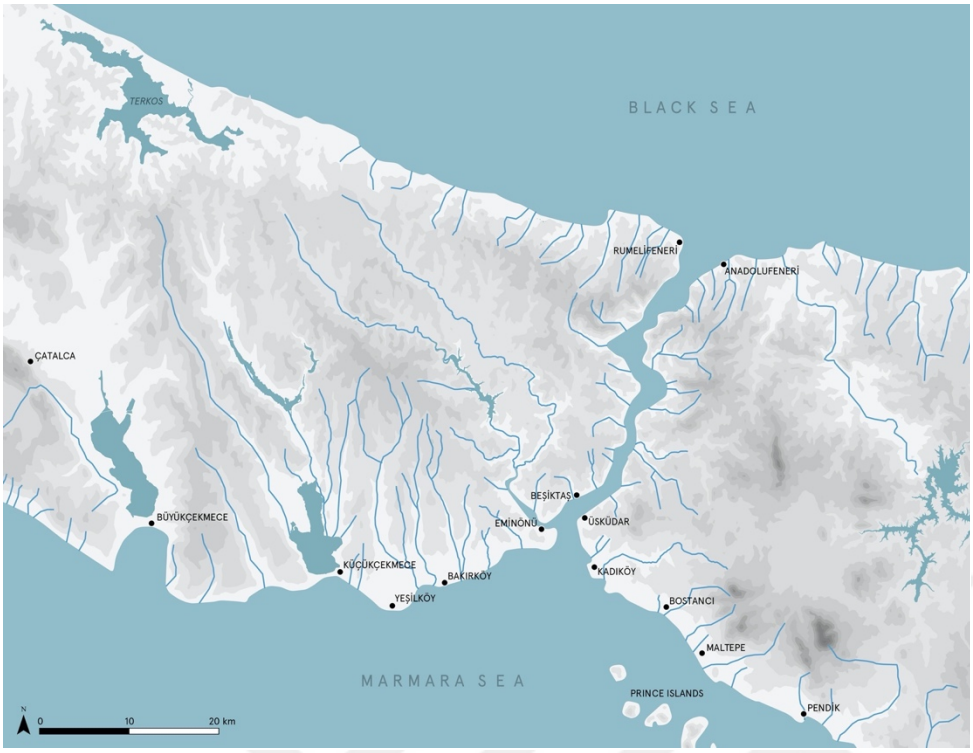


Figure 2.2 The rough outline of Istanbul's water system.

There were 42 river basins in the Bosporus region, 19 on the western side and 23 on the eastern side.[12] None of them was larger than a stream.[13] The streams that flowed from the surrounding countryside provided water for market gardens and mills.[14]

At the entrance to the Sea of Marmara, the bay on the European shore formed a harbor known as the Golden Horn. The Bosporus, which served as a corridor for southwest and northeast winds, created chaos during stormy weather, making the Golden Horn the only safe harbor. This geographical feature gave Istanbul the appearance of a city built on three land masses.[15] The Golden Horn is divided into two parts: the south and the north. The south, within the city walls, served as the administrative

12 Hülya Dinç, *İstanbul Derelerinin Fiziki Değişimi ve Arazi Kullanım İlişkisi* (PhD diss., İstanbul Teknik Üniversitesi, 2015), 19.

13 Ibid., 117–118.

14 Sestini, *Boğaziçi 1779*, 28.

15 Edmando de Amicis, *İstanbul* (Ankara: Türk Tarih Kurumu, 1993), 8.

center of Istanbul (also known as Dersaadet or Asitane) and had the highest population density. To the north was the Galata settlement, known as the city of "Europeans," where the Beyoğlu (Pera) region extended. On the Asian side were Üsküdar, Kadıköy and their suburbs.[16] The economic center of the city was in the triangle formed by the Golden Horn, Galata and Üsküdar.[17] The city owed much of its commercial capacity and wealth to the natural harbor of the Golden Horn with its deep waters. This harbor, with two long and wide shorelines, the northern Beyoğlu–Galata line and the southern Sarayburnu–Unkapanı line, facilitated the trade of various goods, including food. Several regions and centers throughout the empire, especially those that were suitable for water transport (such as the Balkans, the Black Sea and Aegean coasts, Egypt, etc.), were active in supplying the city with food (grain, meat, dried fruit, etc.). However, while some of the city's grain and most of its dairy products were supplied by farms in the surrounding area, much of its vegetable needs were met by market gardens in and around the city.

§ 2.2 Market Gardens and Gardeners of Ottoman Istanbul

The market gardens were an integral part of Istanbul's socio–economic structure,[18] and urban metabolism, contributing to the city's semi–rural

16 Robert Mantran, *İstanbul Tarihi* (İstanbul: İletişim Yayınları, 2020), 17–18.

17 İnalcık, "İstanbul: Bir İslam Şehri," 318; Fertile, vast plains surrounded this central hub. To the west, no significant natural barriers separated the city from Thrace (Trakya). While this was a disadvantage from a defensive standpoint, it offered a significant advantage by allowing easy transportation of food and labor by land. On the Asian side, the hilly terrain extended to the natural barrier of the Gulf of Izmit. (Figure 2.1). See. Mantran, *İstanbul Tarihi*, 17.

18 In Ottoman Istanbul, apart from the gardens of the sultan and his family, most urban agricultural land was classified as waqf and occasionally as private property (*mülk*). Because gardening was a lucrative enterprise, many gardens were owned by elites or by waqfs established by them. In addition, many members of the military class were directly or indirectly involved in gardening. One reason for this was the significant expansion of the economic activities of the janissaries in the capital during the eighteenth

appearance. These gardens with their diverse plant and animal species, functioned a largely self–sustaining ecosystems. In the market gardens, certain main vegetables were typically grown intensively depending on the season. They were sometimes planted together, such as beans and corn, for mutual benefit. To protect the gardens from wind and animal invasion, shrubs such as hazel were planted along their borders.[19] There were fewer fruit trees, however, because growing vegetables was more profitable than growing fruits.[20] At the same time, growing both vegetables and fruit in the same garden has certain ecological disadvantages. A practice that is beneficial to one could be detrimental to the other.[21] In addition, natural herbs, flowers and some spices sold in herbal shops were also available and commonly used. Animal labor, particularly that of donkeys, horses and mules, was essential to the system. It powered water wheels (*bostan dolabı*) and transported baskets to the port or market. In addition, this miniature ecosystem, which included relatively sophisticated equipment such as water wheels, wells, and garden pools, relied on the expertise and knowledge of gardeners, gardening families, and their servants. In a pre–modern setting, the vineyards, orchards and market gardens served as the city's production units, similar to the workshops or factories of their time, while also functioning as centers of recreation and entertainment.

century. Unlike other peasants, they were exempt from taxes. Halil İnalcık, "Eyüp Sicillerinde Toprak, Köy ve Köylü," in *18. Yüzyıl Kadı Sicilleri Işığında Eyüp'te Sosyal Yaşam*, ed. Tülay Artan (İstanbul: Tarih Vakfı Yurt Yayınları, 1998), 9–14. This situation gave the upper echelons of the military class a socio–economic advantage over merchants and artisans. As a result, members of the military class often established waqfs to keep the income they received from the treasury under family control. Unlike the property of merchants, which was protected by Islamic law, the property of the military class was always at risk of confiscation by the sultan. See. Halil İnalcık, "İstanbul," in *İslam Ansiklopedisi*, vol. 23 (İstanbul: Türkiye Diyanet Vakfı, 1988–2016), 227.

19 Sestini, *Boğaziçi 1779*, 29.

20 Aleksandros Paspatis, *Balıklı Rum Hastanesi Kayıtlarına göre İstanbul'un Ortodoks Esnafı: 1833–1860* (İstanbul: Kitapevi Yayınları, 2014), 114–115.

21 Abidin Ege, *Umumi ve Hususi Sebzecilik* (İzmir: Cumhuriyet Basımevi, 1936), 8.

The main purpose of these gardens, unlike other gardens, was to produce vegetables for the market. In this respect, they have always been located close to the city. Because they sold the vegetables they grew in the city and bought what they needed (fertilizer, etc.) from there. The variety of vegetables grown in these types of gardens was neither as limited as in field–based vegetable production[22] nor as varied as in kitchen gardens.[23] The market gardens did not grow vegetables that were cheap and suitable for long–distance transport.[24] Instead, they grew perishable vegetables that were difficult to transport and sold at high prices. They produced five or six harvests in a single year. This was due to the heavy use of fertilizers and abundant irrigation. The amount of capital spent per

22 The variety of vegetables grown in this type of field was quite limited. Fertilizer and water were either used sparingly or not at all. The areas where this type of farming was practiced were not enclosed by walls or similar barriers. This area consisted of locations dedicated to vegetable production, with relatively cheap land and located along major transport routes (e.g. railways). The vegetables grown in these areas were those that could be transported over long distances, such as okra, beans, onions and potatoes. See. Ege, *Umumi ve Hususi Sebzecilik*, 6–8.

23 Specialized vegetable cultivation was developed with the aim of supplying a family with the vegetables it needed. It was found close to the house to which it was attached. This is because the vegetables would only be for the household's own consumption. As it was set up to meet the needs of the household to which it was attached, it had to have vegetables available in all seasons. As a result, these types of gardens contained a wide variety of vegetables. See. Ege, *Umumi ve Hususi Sebzecilik*, 6–8. The size of the kitchen garden depended on the size of the household and its needs. It has been calculated that a half-a-decare (dönüm) garden could provide enough vegetables for a family of six. See. Ege, *Umumi ve Hususi Sebzecilik*, 16–17. .According to calculations by the Byzantine historian Koder, an area of 40 square meters was sufficient to supply the annual vegetable needs of one person. See. J. Koder, "Fresh Vegetable for the Capital," 51. In the Ottoman Istanbul, in addition to the many commercial vineyards, market gardens, and fields in the city, many homes had private kitchen gardens. The most common type of house built in Istanbul was the walled house with a garden. Depending on the circumstances, these houses could have one or more rooms. The courtyards of such houses often contained vegetable gardens, barns, stables, ovens, wells, and similar structures. In addition, villas built on the outskirts of the city by members of the palace and high–ranking bureaucrats usually included large orchards and market gardens. See. İnalcık, "İstanbul", 231.

24 Nevertheless, vegetable production in the city played a crucial role in meeting the needs of low-income groups who could not afford meat. See. Sestini, *Boğaziçi 1779*, 52.

decare (*dönüm*) was high due to various expenses (fertilizer, labor, etc.). Some gardens were enclosed by fences or walls.[25]

The first condition to be considered in determining the location of the gardens was that they should be either within the city or in areas close to the city. There were three main reasons for this. First, the fertilizers used in the gardens came from the cities (households, stables, inns, etc.). Second, the vegetables grown in the gardens (such as lettuce, tomatoes, etc.) were perishable foods that were not suitable for long–distance transport. Lastly, the garden owners could easily follow the vegetable market in the city.[26]

These gardens were typically located in areas closely associated with water, such as riverbeds, alluvial soils where small streams flowed into the sea, dry ditches and cisterns, or soils suitable for digging wells. The valleys[27] through which the rivers flowed offered favorable conditions for vegetable cultivation due to their soil and climate.[28] They were widely scattered and quite numerous in the city. Alexander Paspatis,[29] compared the abundance of gardens in the city to those of its European counterparts:

> No major European city has as many gardens and gardeners as Istanbul, located near markets and residential areas. Especially

25 Ege, *Umumi ve Hususi Sebzecilik*, 6–8.

26 Ibid., 12.

27 Valleys, which are defined as the area between two mountains, can be divided into two types: narrow valleys and wide valleys. If the width of the land between two mountains is 300 meters, it is called a narrow valley, and if it is wider, it is called a wide valley. In narrow valleys, the mountains on either side create too much shade, so vegetables do not get enough sunlight. Depending on the season, frost and fog can also occur. The best areas for growing vegetables were wide valleys. In these areas, the disadvantages of narrow valleys were not present. In the valleys, the land would be fertile and irrigated. In addition, to facilitate irrigation of the vegetable crops, it was preferred that the land had a slight slope on one side. See. Ege, *Umumi ve Hususi Sebzecilik*, 13–15.

28 Sestini, *Boğaziçi 1779*, 27, 44.

29 A nineteenth–century Bulgarian doctor who studied the health conditions of the Bulgarian minorities in Istanbul.

> along the shores of the Sea of Marmara, inside the walled city, there are gardens, where various vegetables are grown.[30]

A significant portion of the gardens within the city walls were concentrated in the southwestern region, where the population was less dense. In addition, market gardens were located along the valley of the Bayrampaşa (Lycus) River, which ran almost through the center of the walled city, as well as in the alluvial area known as the Langa (Vlanga), where the river emptied into the sea. The moats inside and outside the walls, stretching from Ayvansaray, Eyüp and Hasköy towards Yedikule, were also the sites of intensive agriculture. (Figure 2.3)

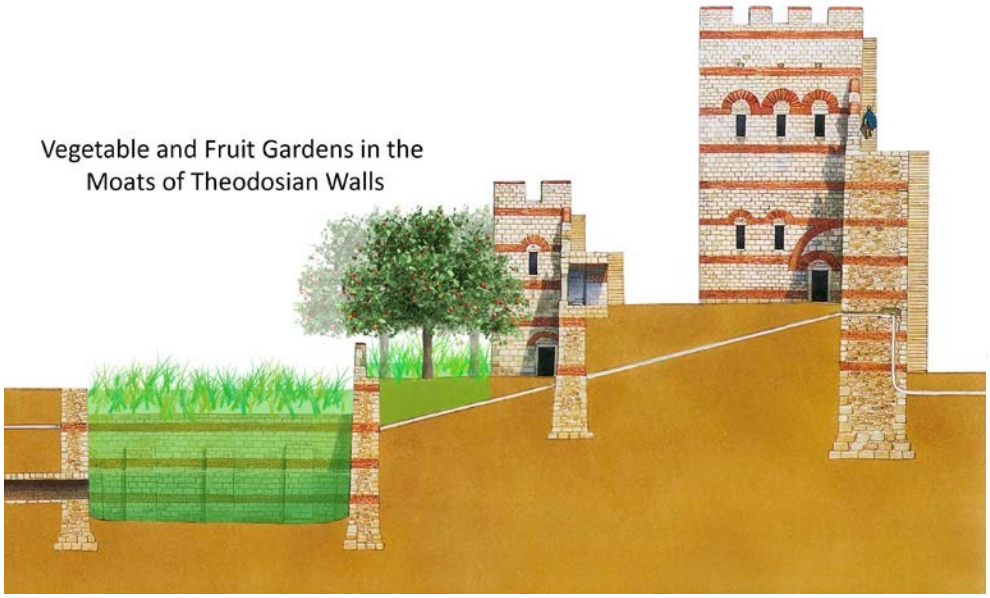


Figure 2.3 Vegetable and Fruit Gardens in the Moats of Theodosian Walls. SOURCE: (Akdal, 2017).

Ekrem Hakkı Ayverdi's map below illustrates the vegetable gardens and the Bayrampaşa (Lycus) stream. It shows that the gardens are concentrated in the valley of the river and in the delta where the river flows into the sea. In addition, the number of gardens in the area to the south–west of the stream is quite high. On the map, the locations of the gardens

30 Paspatis, *İstanbul'un Ortodoks Esnafı*, 116.

recorded in the 1734 register[31] are symbolically marked with red dots.[32] These red dots also seem to be concentrated in the south–western part of the walled city. (Figure 2.4).

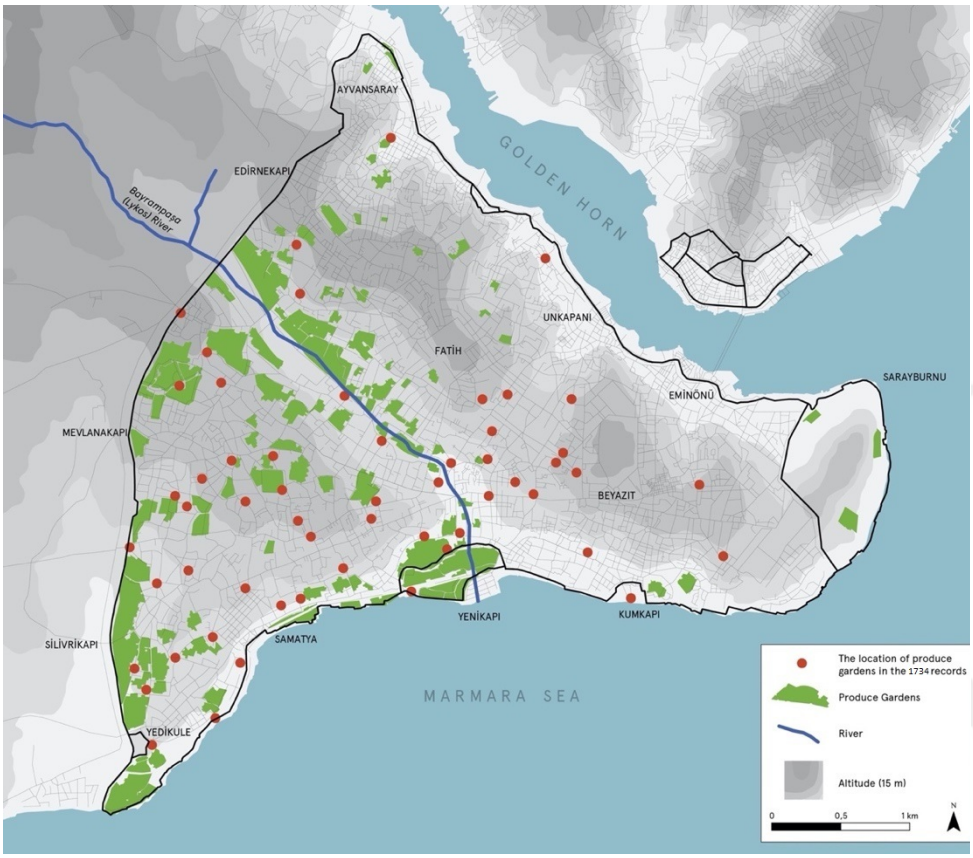


Figure 2.4 The location of market garden in the 1734 records, illustration on the Map of Ekrem Hakkı Ayverdi, 19th Century. SOURCE: BOA. D.BŞM. d 1841.

According to Paspatis, the presence of so many market gardens in a densely populated area like the walled city was due to the movement of the Muslim population caused by fires, epidemics, and similar events. This situation led to regional depopulation within the walled city,

31 BOA. D.BŞM. d 1841. See. Table 2.1

32 Many of the names of gardens in the 1734 register include information to help determine their approximate location. These place names are approximately marked on the map of Ekrem Hakkı Ayverdi.

resulting in the emergence of small and large market gardens cultivated by gardeners from the Balkans, including Slavs and Albanians. He argues that the main reason for the increase in gardens within the walled city was that non–Muslim subjects were legally prohibited from building houses and settling on the vacant lands left behind by Muslims.[33] Moreover, it was very difficult to get permission from the state to build houses or create new neighborhoods on these gardens, both inside and outside the city walls.[34]

> Along the desolate roads leading to the gates of the land walls, one sees hundreds of decare of market gardens sold at very low prices with no buyers, as well as ruined wooden pavilions (*köşk*) with gardens. These properties could only be purchased by Muslims as no one else was allowed to buy them.[35]

Outside the city, vegetable and fruit production for Istanbul flourished the west, including Küçükçekmece, Büyükçekmece, Çatalca and Silivri, as well as in the east, in areas such as Maltepe, Kartal, Pendik, Yalova and other settlements along the Sea of Marmara. Beyond the walls of Istanbul lay the vast plains of Thrace, while vineyards stretched from Üsküdar to İznik. Travelers often praised the size and exceptional taste of the city's produce.[36] (Figure 2.5).

> The areas surrounding the cities on the Asian shore opposite the Princes Islands are covered with orchards and market gardens irrigated by streams coming down from the mountains. Meanwhile, the higher areas are better suited for vineyards and cherry trees.[37]

In addition, the farms in this region, many of which included dairies, were engaged in raising livestock and crops, as well as producing dairy

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33 Paspatis, *İstanbul'un Ortodoks Esnafı: 1833–1860*, 115.

34 This situation began to change with the population growth from the second half of the nineteenth century, which will be examined in the following chapters.

35 Ibid., 115.

36 Byzantios, *Constantinople*, 73–84.

37 Paspatis, *İstanbul'un Ortodoks Esnafı*, 116.

products such as milk, cream, yogurt, and cheese. Because these farms were as lucrative a source of income as market gardens, high–ranking state officials, including viziers, pashas, ulama and retired janissaries, often sought the rights to manage them, and in some cases even ran them personally.[38]

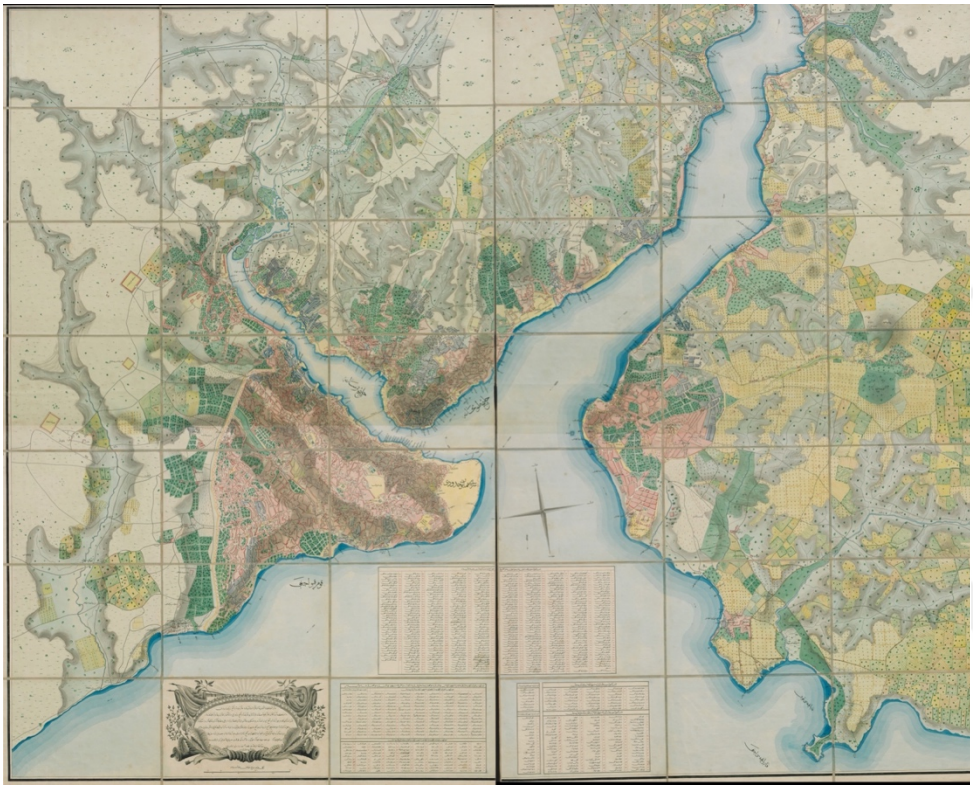


Figure 2.5 The Map of Mühendishane-i Berr–i Hümayun, 1845.

The population (nüfus) and guild (esnaf or kefil) registers were perhaps the most detailed sources of quantitative and qualitative information on gardens and gardeners in Istanbul, among other occupations.[39] These registers were designed to monitor and control the migrant male population working in the city. They recorded who worked where and for how

38 Wolfgang Müller-Wiener, *İstanbul'un Tarihsel Topografyası* (İstanbul: Yapı Kredi Yayınları, 2001), 20;İnalcık, "Eyüp Sicillerinde Toprak, Köy ve Köylü," 9–14.

39 The steward of the gardeners (bahçıvanlar kethüdası) kept these registers. This topic will be discussed in more detail below.

following information, with some providing more detail: the location of the garden, its name (sometimes referring to the type of vegetable grown, sometimes to a special feature within the garden, or sometimes to a place), the number of workers employed in the garden and their position (master, apprentice, etc.), their marital status, physical characteristics, home towns, and other relevant details. The registers also contained the words "reft", meaning gone, and "meft", meaning deceased, next to the names of some gardeners. Some registers also contain information about the taxes the gardeners had to pay.

The table below contains ten records, mainly from the eighteenth and nineteenth centuries, focusing on market gardens[40] and gardeners in different regions of Istanbul. Although most of them have been the subject of previous research, the 1845 register, which covers the market gardens between Sütlüce and Sarıyer and is the most recent among them, has been studied within the framework of this dissertation. This register was created during the reign of Abdülmecid (1839–1861), who succeeded his father Mahmud II, one of the key figures of Ottoman modernization. It was therefore more systematic than the others. Unlike the other registers, this one recorded 1) the churches in Istanbul to which the gardeners, most of whom had migrated from the Balkan provinces, belonged, and 2) their exact ages in numerical form.[41] 3) the amount of tax the gardeners had to pay (Table 2.1).

40 In some cases, orchards were also included separately. However, as they are few in number, they have been included in the market garden group for the purposes of this study.

41 In earlier registers, the age of the gardeners could only be inferred from the adjectives given to them, such as 'boy' or 'elderly'.

Table 2.1 Geographical distribution of market gardens and gardeners according to the specified registers

	Register No.	Date	Geographical Area	Gardens	Gardeners
1	D.M. d 36860*	1637	Üsküdar	60	184
2	NFS. d 1*	1733	Istanbul Extra-muros (from Yedikule to Eyüp)	167	636
3	A.{DVN. d 831***	1792	Istanbul Extra-muros (from Yedikule to Eyüp)	184	668
4	NFS. d 4*	1793	Istanbuk Extra-muros (Eyüp to Yedikule and Çatalca)	276	938
5	D.BŞM. d 1841*	1734	Istanbul Intra-muros	228	978
6	NFS. d 15*	1827	Istanbul Intra-muros	231	986
7	A.{DVN. d 899***	1792	Both side of the Bosphorus	260	893
8	A.{DVN. d 881**	1835	• Eastern shore of the Bosphorus (Kadıköy to Anadolu Kavağı) • Western shore of the Bosphorus (Beşiktaş to Rumeli Kavağı)	169 89	611 297
9	D.BŞM. d 42648****	1836	• Eyüp–Hasköy–Sütlüce	79	232
10	NFS. d 369*****	1845	(Sütlüce to Sarıyer)	175	3,630

SOURCE (BOA) D.M. d 36860; D. BŞM. d 1841; NFS. d 1; A. {DVN. d 831; A. {DVN. d 881; NFS. d 4; NFS. d 15; A. {DVN. d 899; D. BŞM. d 41648; NFS. d 369.

* Register previously analyzed by Ayşe Nur Akdal for her master's thesis (Akdal 2016).

** Register previously transcribed by Hüseyin Nejat Ertuğ (Ertuğ, 1997).

*** Unpublished register transcribed by Cengiz Kırlı. I am grateful to him for sharing them with me.

**** Register previously examined by Cengiz Kırlı (Kırlı, 2001).

***** This register was analyzed for the first time in this dissertation.

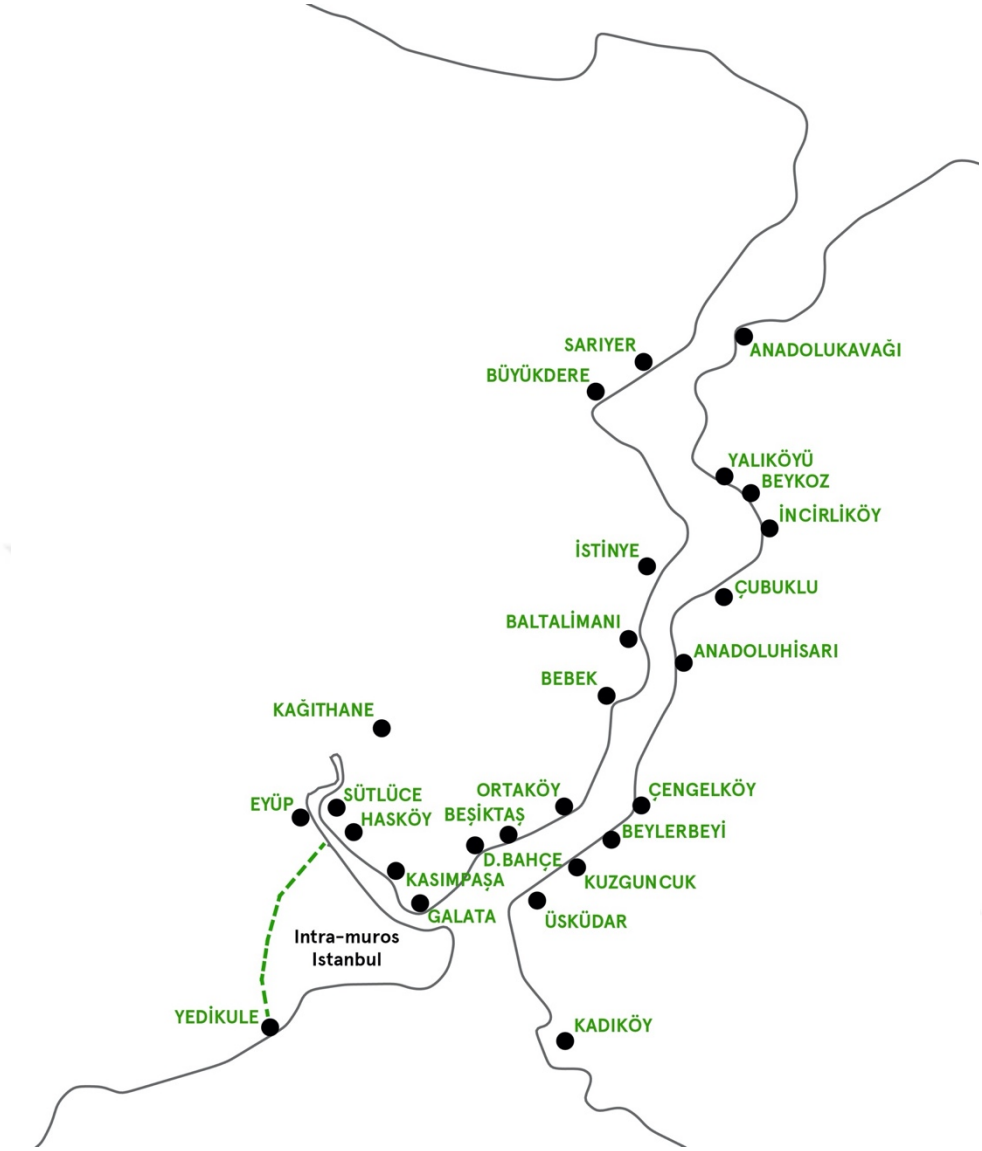


Figure 2.6 The location of market garden in the records SOURCE: (BOA) D.M. d 36860; D. BŞM. d 1841; NFS. d 1; A. {DVN. d 831; A.{DVN. d 881; NFS. d 4; NFS. d 15; A. {DVN. d 899; D. BŞM. d 41648; NFS. d 369.

These registers show that while the number of gardens inside the city walls remained stable, the number of gardens outside the walls seems to have increased over the years. For example, while in 1734 there were 228 gardens within the city walls, by 1827 the number of gardens had increased slightly to 231. The number of gardens outside the city walls (Yedikule–Eyüp) was recorded as 167 in 1733, 184 in 1792 and 276 in 1793. It shows that the number of market gardens outside the city walls increased slightly over the years. However, the reason for the extreme increase in 1793 was the inclusion of the Çatalca gardens in the count. In general, the increase in the number of gardens outside the city walls can be explained by the population growth of the city and its expansion outwards.[42] In the valleys where the rivers flowed on both sides of the Bosporus and in the village areas where they ended, there were large market gardens. The number of gardens here, around 260, seems to have remained almost unchanged over a period of about fifty years, from 1792 to 1835. However, according to these registers, there was a significant difference between the number of market gardens on the western and eastern sides of the Bosporus. The 1835 register shows that the number of gardens on the eastern side of the Bosporus (169) was almost double that on the western side (89). This could be because the hills on the western side are rockier and fall more steeply towards the sea, there are fewer rivers and the temperature is slightly lower than on the eastern side.[43] The geographical coverage of these registers may differ. Unfortunately, it was not possible to make comparisons between certain regions over the years. For example, the only information we have is that in 1637 there were 60 vegetable gardens in Üsküdar alone. Another register dated 1845

42 This subject is examined in detail in Chapter 3.

43 Sestini notes that the vineyards along the Bosporus were always located near water, facing the sunrise or the midday sun. "On the eastern side, grapes ripen faster due to the relatively mild climate, despite its proximity to the western side. As a result, grape harvest permits must be obtained 15 days earlier on this side than on the western side. Grapes grown on the eastern side are primarily for table consumption. In addition, since the vineyards on the eastern side are owned by Muslims, they are exempt from the permits required for non–Muslims." See., Sestini, Boğaziçi 1779, 37.

will be examined in detail in the following sections, there were 175 market gardens between Sütlüce and Sarıyer. This register, which covers the northern part of the Golden Horn and the western side of the Bosporus, was comparable both within itself and with other registers. (Table 2.1, Figure 2.6).

Gardeners would consider the following factors when deciding the size of their gardens: 1) Market demand 2) Capital 3) Water 4) Fertilizer 5) Know–how and labor.[44] There was no clear information about the size of the gardens in Istanbul. The amount of human and animal labor required varied according to the size of the garden. Vineyards and market gardens were usually designed to fit the amount of land a worker could cultivate in a single day.[45] The size of the gardens could be roughly estimated from the number of gardeners working in them.[46] In this calculation, some of the gardens in certain areas of the city were large, while others were relatively small. The largest vineyards and market gardens in Istanbul were located in the Bosporus region.[47] According to Sestini, many of the gardens there ranged in size from sixty to one hundred decare in size.[48] The 1845 record also shows that the gardens along the Sütlüce–Sarıyer line were quite large, with an average of 20 gardeners. (Table 2.2).

44 Ege, *Umumi ve Hususi Sebzecilik*, 16–17.

45 Suraiya Faroqhi, Osmanlı'da Kentler ve Kentliler (İstanbul: Tarih Vakfı Yurt Yayınları, 2000), 315.

46 A gardener with an apprentice could manage a market garden of three decare. See. Ege, *Umumi ve Hususi Sebzecilik*, 16–17.

47 Şecaat, "Sebzeciliğimiz," in *Birinci Ziraat Kongresi: İhtisas Raporları*, vol. 1 (Ankara: Milli İktisat ve Tasarruf Cemiyeti, 1931), 956–966.

48 Faroqhi, "18. Yüzyılda Boğaz'da Üzüm ve Şarap Üretmek," 97.

Table 2.2 Number of gardeners per garden in the various registration.

Register No.	Date	Geographical Area	Number of Gardener per Garden
D.M. d 36860	1637	Üsküdar	3,06
NFS. d 1	1733	Istanbul Extra–Muros	3,8
A. {DVN. d 831	1792	Istanbul Extra–Muros	3,63
NFS. d 4	1793	Istanbul Extra–Muros	3,39
D. BŞM. d 1841	1734	Istanbul Intra–Muros	4,28
NFS. d 15	1827	Istanbul Intra–Muros	4,26
A. {DVN. d 881	1835	Both Side of the Bosporus	3,51
A. {DVN. d 899	1792	Both Side of the Bosporus	3,43
NFS. d 369	1845	Sütlüce–Sarıyer	20,74

SOURCE (BOA) D.M. d 36860; D. BŞM. d 1841; NFS. d 1; A. DVN. d 831; A.DVN. d 881; NFS. d 4; NFS. d 15; A. DVN. d 899; D. BŞM. d 41648; NFS. d 369.

According to the 1845 register, which is examined for the first time in this dissertation, Kasımpaşa stood out among other districts with its 53 gardens and 1473 gardeners. In second place, Dolmabahçe had half as many gardens and gardeners as Kasımpaşa. The other regions with gardens and gardeners were, in order, as follows Beşiktaş, Ortaköy, Sütlüce, Galata, İstinye, Baltalimanı, Büyükdere, Kağıthane, Bebek and Sarıyer. While the gardens in Kasımpaşa, Ortaköy and Dolmabahçe were large, those in Kağıthane, Galata, İstinye and Sarıyer were relatively small. This register, unlike the others, also included those who worked in the gardens on a daily basis (aylakçı). (Table 2.3).

This register showed a regional pattern of rhythmic increases and decreases in the number of gardeners and consequently in the size of gardens. For example, while Kasımpaşa and Dolmabahçe had a large number of gardeners, Galata, which lies between these two areas, had fewer gardeners. The topography of the Bosporus, with its hills and valleys, may have played a role. There were probably more and larger gardens in the wide valleys, and fewer in the narrow valleys compressed by the hills. (Table 2.4, Figure 2.7).

Table 2.3. Western shore of the Bosporus (Sütlüce–Sarıyer).

Register No.	Date	Geographical Area	Gardens	Gardeners	Day Workers	Total
NFS.d 369	1845	Sütlüce	13	196	18	214
		Kağıthane	10	99	-	99
		Kasımpaşa	53	1473	327	1800
		Galata	15	182	10	192
		Dolmabahçe	26	685	24	709
		Beşiktaş	13	218	45	263
		Ortaköy	8	201	32	233
		Bebek	6	99	-	99
		Baltalimanı	7	143	17	160
		İstinye	14	151	16	167
		Büyükdere	4	106	8	114
		Sarıyer	6	77	1	78
Total			175	3,630	498	4,128

SOURCE BOA. NFS. d 369.

Table 2.4 Number of gardeners per garden in the western shore of the Bosporus (Sütlüce–Sarıyer).

Register no	Date	Geographical Area	Gar Number of Gardener per Garden
NFS.d 369	1845	Sütlüce	16,46
		Kağıthane	9,9
		Kasıpmpaşa	33,96
		Galata	12,8
		Dolmabahçe	27,26
		Beşiktaş	20,23
		Ortaköy	29,12
		Bebek	16,5
		Baltalimanı	22,85
		İstinye	11,92
		Büyükdere	28,5
		Sarıyer	13

SOURCE BOA. NFS. d 369.

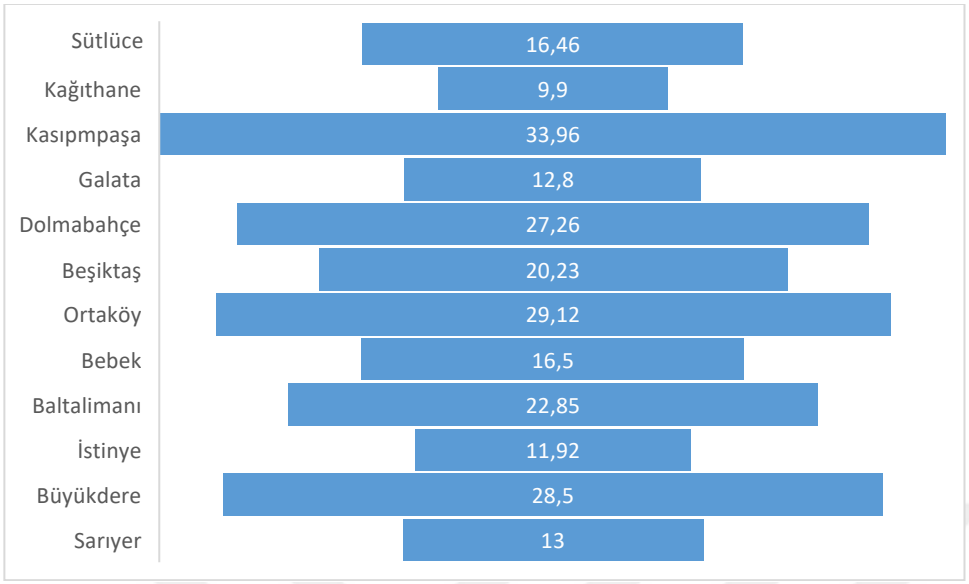


Figure 2.7 Number of gardeners per garden in the western shore of the Bosporus (Sütlüce–Sarıyer) SOURCE: BOA. NFS. d 369.

One reason for the presence of market gardens in cities was to take advantage of the abundant and cheap labor. Sestini also recognized that gardening was a labor–intensive activity. He emphasized that gardens were located in densely populated areas, since anyone engaged in gardening had to hire workers on a daily wage (*yevmiye*) basis.[49] There were thousands of gardeners in Ottoman Istanbul. Around a thousand gardeners worked only within the city walls alone. The number of gardeners between Sütlüce and Sarıyer increased by two and a half times, with 3,630 gardeners working in this area. (Table 2.1). Unlike farming, gardening was a lucrative but highly labor–intensive occupation, whether they worked in large or small gardens. According to Kırlı and Başaran, the average number of workers in workshops was 2.5, indicating that gardening

49 Faroqhi, "18. Yüzyılda Boğaz'da Üzüm ve Şarap Üretmek," 96.

required more labor than other industries.[50] The average number of gardeners in market gardens ranged from 3.06 (Üsküdar, 1637) to 33.96 (Kasımpaşa, 1845). As gardening was a labor–intensive occupation, it was generally undertaken by young, unmarried men.

The 1845 register, which covers the area between Sütlüce and Sarıyer, gives detailed information about the age of the gardeners. The age group with the highest number of gardeners was 21-25, followed by the 16-20 age group. The youngest worker on the register was 8 years old, while the oldest was 82. (Table 2.5, Figure 2.8).

Table 2.5 Age range of gardeners from Sütlüce to Sarıyer, 1845

Age range	Number of gardeners (with age recorded)	Age range	Number of gardeners (with age recorded)
8–10	13	46–50	140
11–15	289	51–55	92
16–20	644	56–60	59
21–25	673	61–65	34
26–30	495	66–70	18
31–35	483	71–75	7
36–40	386	76–80+	4
41–45	238	Unknown	55
		Total	3,630

SOURCE BOA. NFS. d 369.

50 Cengiz Kırlı and Betül Başaran, "18. Yüzyıl Sonlarında Osmanlı Esnafı," in *Osmanlı'dan Cumhuriyet'e Esnaf ve Ticaret*, ed. Fatmagül Demirel (İstanbul: Tarih Vakfı Yurt Yayınları, 2012), 7–42.

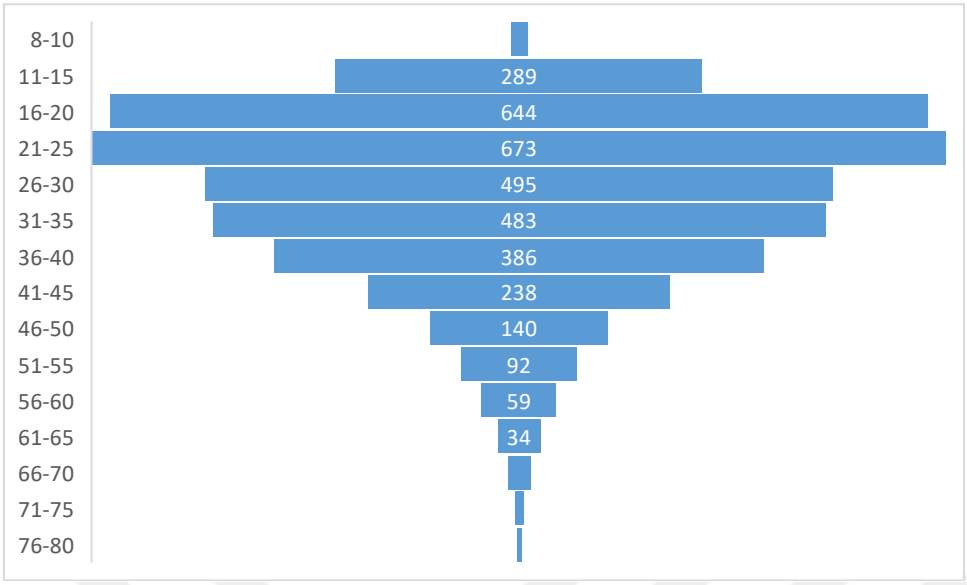


Figure 2.8 Number of gardeners in each age group. SOURCE: BOA. NFS. d 369.

In Ottoman Istanbul, most of these gardeners, which were predominantly non–Muslim, were coming from Balkan provinces such as Permedi (Permet), Manastır (Bitola), Ohri (Ohrid). The places of migration included not only provinces but also small villages. The tables below, and the cluster analysis maps created from the information in these tables, provide a detailed insight into the origins of the gardeners.

For about a century, from 1734 to 1827, the gardeners who worked in the walled city came mainly from the regions of Albania and northern Macedonia (such as Permet, Ohri, Manastır, etc.) and Niğde in Anatolia. In 1827, the migration from Niğde decreased and the number of gardeners who identified themselves as Istanbulites increased.[51] In the 1827 register, most of those who identified themselves as Istanbulites were married and held the position of master (usta). In other words, it can be seen that migrants originally from the Balkan provinces settled in Istanbul. These gardeners no longer identified themselves with the Balkan provinces from which they came. The registration of 1734, which focused on

51 In some cases, the registration also includes a reference to a neighbourhood or village in Istanbul. However, for the sake of clarity, they have been grouped under the heading 'Istanbul' in the maps and tables produced for this dissertation.

gardeners within the walls, was made for security reasons shortly after the rebellion of Patrona Halil (1730). It is possible that by 1827 the gardeners had begun to identify themselves as Istanbulites in order to conceal their Albanian identity. As the palace was located within the walled city at this time, the administration would have been more concerned with the ethno–religious identities and marital status of the gardeners in this area. (Figure 2.9 and Figure 2.10).

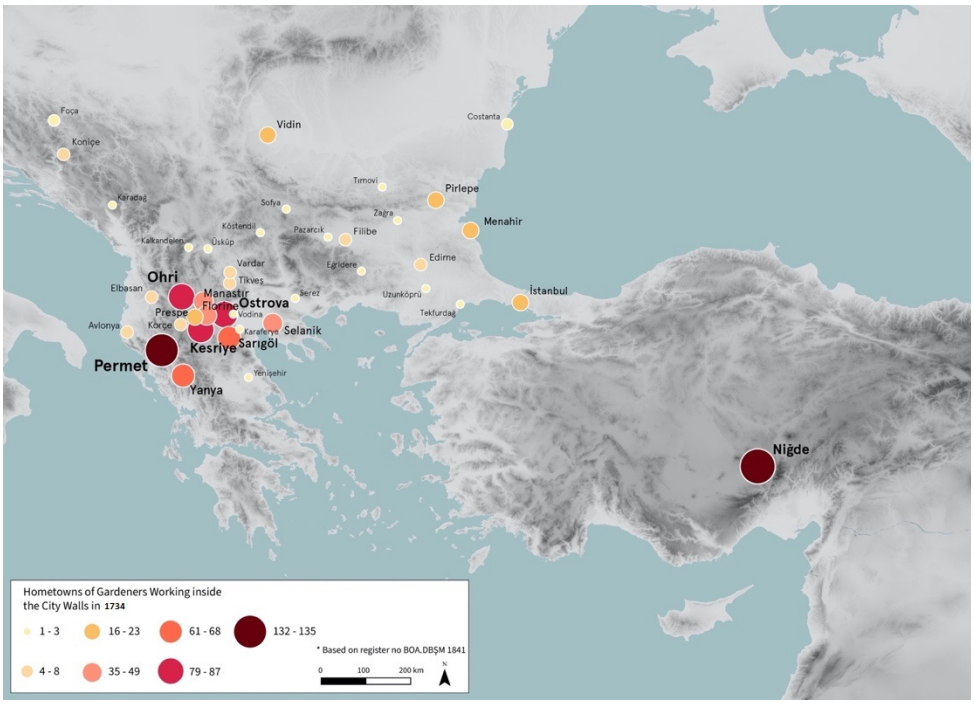


Figure 2.9 Hometowns of the Gardeners Working inside the City Walls in 1734. SOURCE: BOA. DBŞM. d 1841.

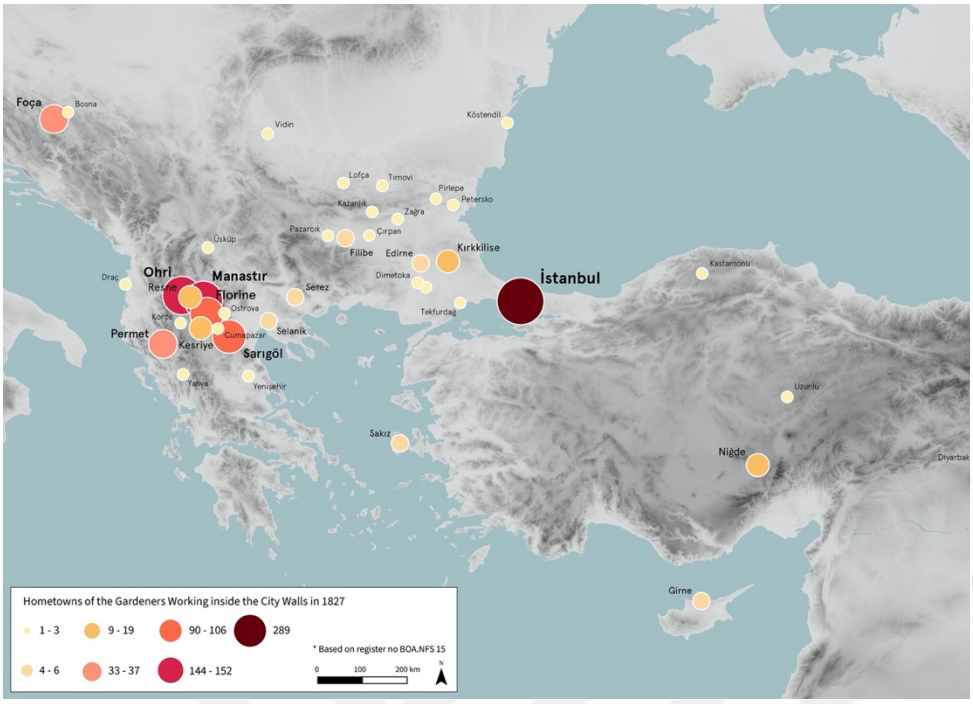


Figure 2.10 Hometowns of the Gardeners Working inside the City Walls in 1827. SOURCE: BOA. NFS. d. 15.

According to the registers of 1733, 1792 and 1793, which focus on the areas outside the city walls (Yedikule–Eyüp), the locations from which the gardeners came became much more diverse over the years. In this region the gardeners who came from the area of present–day Bulgaria were more predominant. The 1793 registration was slightly different from the others in terms of the area covered. In addition to the Yedikule–Eyüp line, it included the Çatalca region. Unlike the others, this register contained a large number of small migration centers rather than a few large migration centers. These small migration centers were typically settlements in what is now Bulgaria. Perhaps the inclusion of Çatalca has increased the proportion of farm and household gardens. Thus, fellowship networks "outside the city" may have been less strong and effective than those in the city center. (Figure2.11, Figure 2.12, and Figure 2.13)

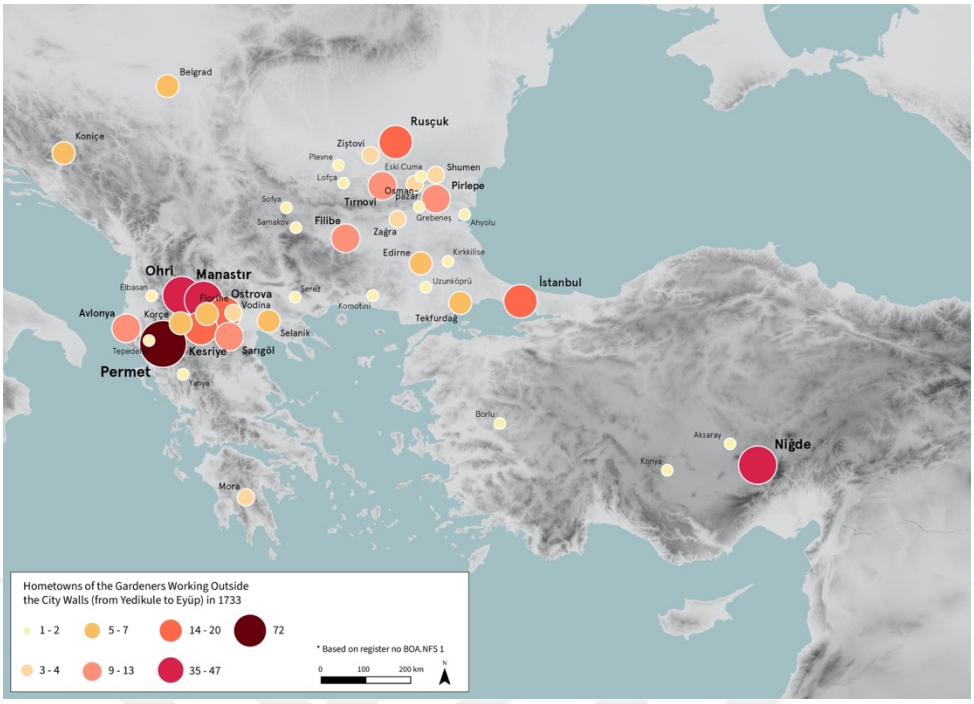


Figure 2.11 Hometowns of the Gardeners Working Outside the City Walls (from Yedikule to Eyüp) in 1733. SOURCE: BOA. NFS. d 1

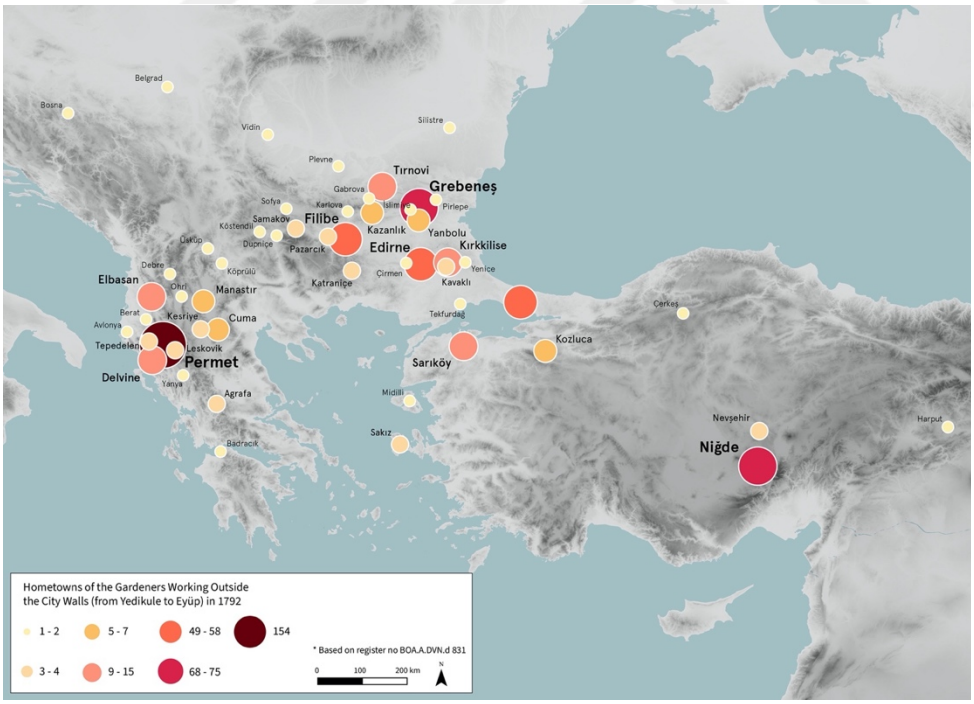


Figure 2.12 Hometowns of the Gardeners Working Outside the City Walls (from Yedikule to Eyüp) in 1792. SOURCE: A. {DVN.d 831.

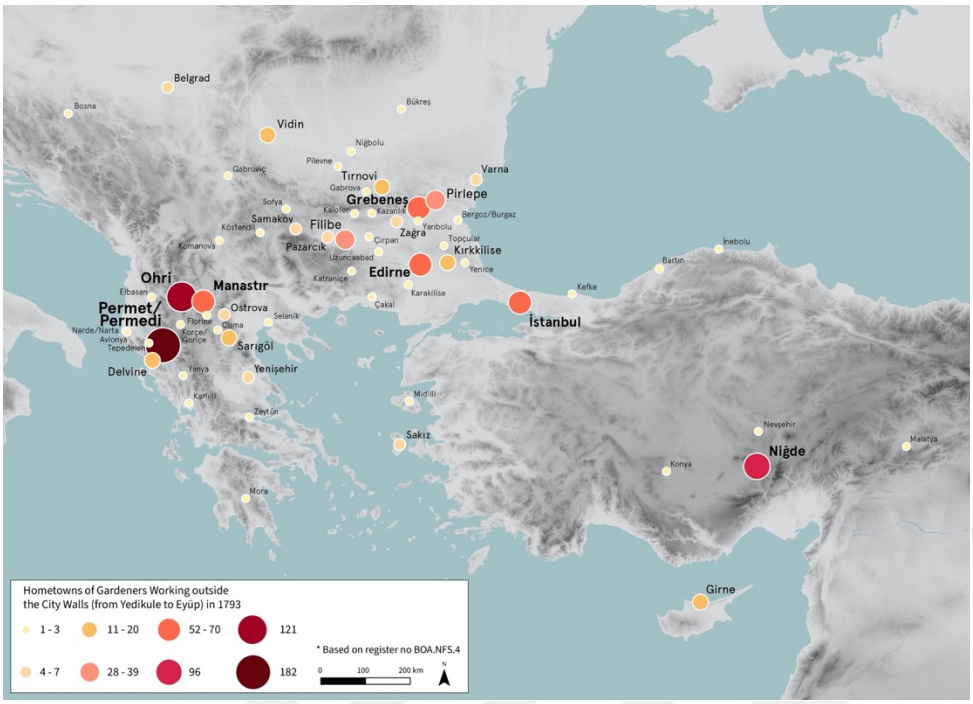


Figure 2.13 Hometowns of the Gardeners Working outside the City Walls (from Yedikule to Eyüp and Çatalca) in 1793. SOURCE: BOA. NFS. d 4

The most suitable register for comparing fellowship networks among gardeners in Istanbul is the 1845 register, which covers the area from Sütlüce to Sarıyer. Although the gardeners recorded in this register worked in neighboring districts, they appear to have migrated from quite different provinces. For example, most of the gardeners in Sütlüce were non–Muslims from Ohri and Manastır and Amasra in Anatolia. (Figure 2.14). The majority of gardeners in Kağıthane were non–Muslims who identified themselves as Istanbulites. (Figure 2.15). The gardeners in Kasımpaşa and Galata were mostly non–Muslims from Ohri, Manastır and Pirlepe. (Figure 2.16 and 2.17). The situation at Dolmabahçe was very different. Unlike in other districts, the majority of gardeners here were Muslims who had come from Koniçe and Permet. This was probably because the area was close to the administrative center of the time. Here, the number of gardeners coming from Ohri and Manastır was quite small. (Figure 2.18). In Beşiktaş, the number of gardeners from Ohri, Ergiri and Permet increased, while the number from Koniçe decreased. In this

district, the number of non–Muslim gardeners had increased again. (Figure 2.19). The gardeners in Ortaköy followed a similar profile to those in Beşiktaş in terms of their place of origin and ethnic–religious background. (Figure 2.20). The gardeners in Baltalimanı were mainly non–Muslims from Ergiri and Boğdanya. (Figure 2.21). In İstinye, gardeners from Manastır and Ergiri were in the majority. (Figure 2.22). At Büyükdere, the gardeners from Ergiri were by far the most numerous. (Figure 2.23). Thus, between Beşiktaş and Büyükdere, the dominance of the Ergiri gardeners had increased. At the northern end of the Bosphorus, most gardener in Sarıyer identified themselves as Istanbulites. (Figure 2.24). According to the data, places like Ohri, Manastır and Permet stood out as hometowns until Baltalimanı, while after Baltalimanı Ergiri became more prominent. Finally, this register shows that the proliferation of gardeners in Istanbul's gardens, rooted in fellowship networks (*hemşerilik ağı*), highlights the inadequacy and oversimplification of the myth of an "ethno-religious division of labor" in the Ottoman Empire, a society characterized by its complex, multilayered social, economic, and geographical structure. As scholars have noted, this division should be expanded to include factors such as space, occupation, and regional ties.[52]

52 Cem Behar, *A Neighborhood in Ottoman Istanbul: Fruit Vendors and Civil Servants in the Kasap İlyas Mahalle* (Albany: State University of New York Press, 2003), 160–166; Cengiz Kırlı, "A Profile of the Labor Force in Early Nineteenth-Century Istanbul," *International Labor and Working–Class History* no. 60 (2001): 125–140.; Donald Quataert, *The Ottoman Empire* (Cambridge: Cambridge University Press, 2000).

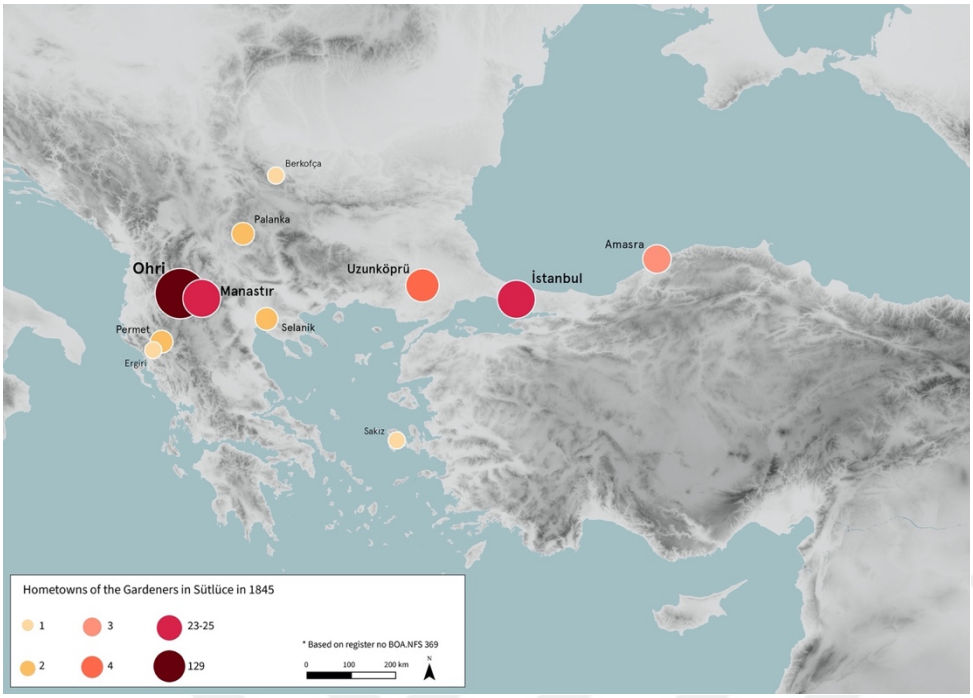


Figure 2.14 Hometown of the Gardeners in Sütlüce in 1845. SOURCE: BOA NFS. d 369.

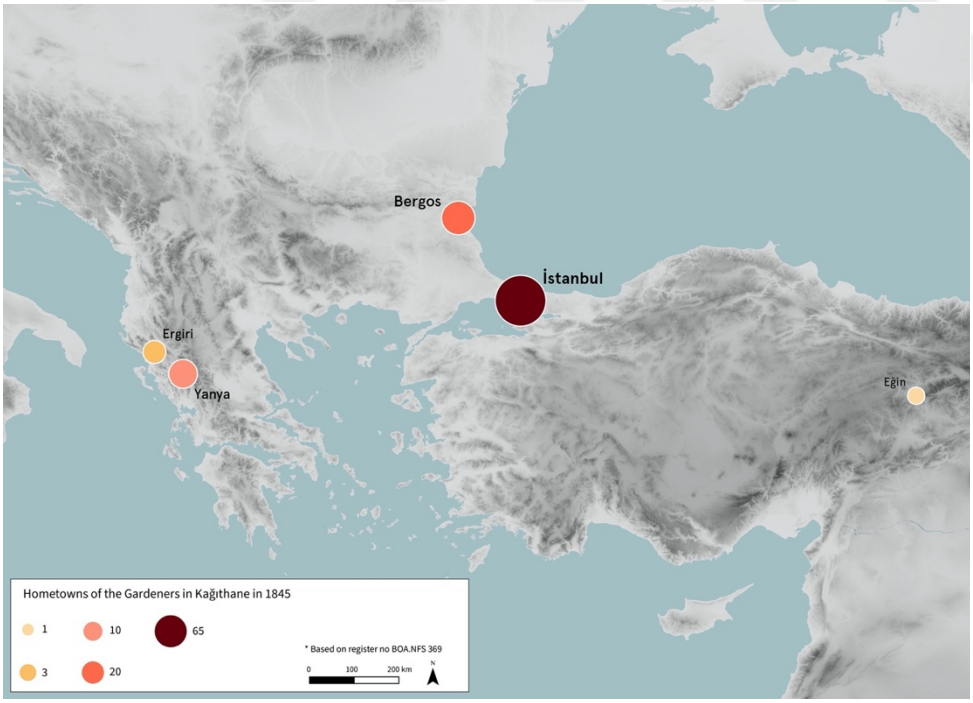


Figure 2.15 Hometown of the Gardeners in Kağıthane in 1845. SOURCE: BOA NFS. d 369.

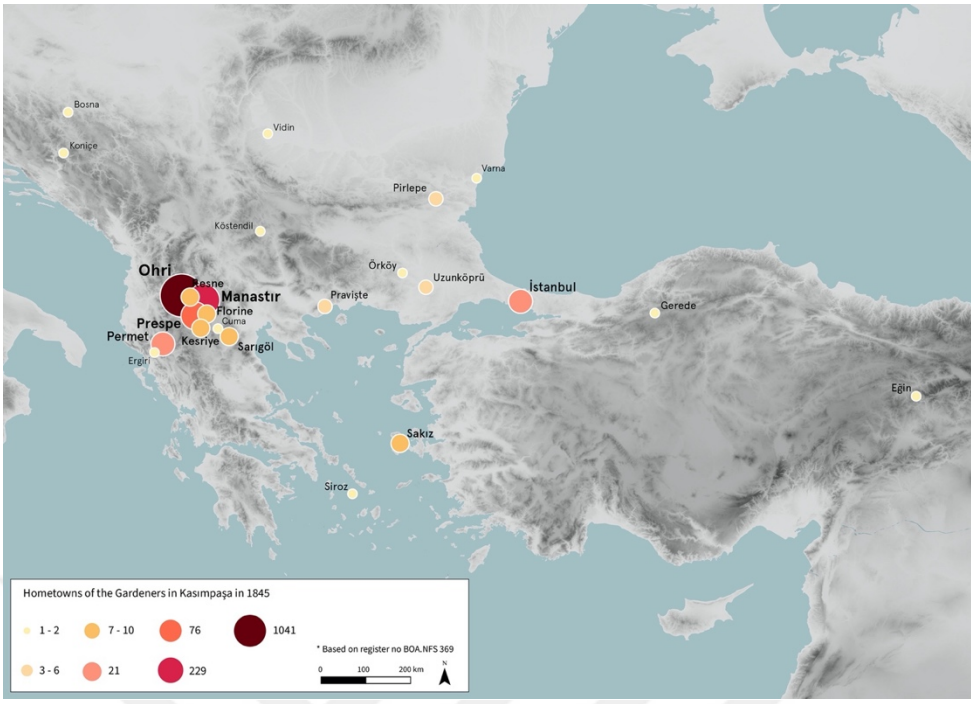


Figure 2.16 Hometown of the Gardeners in Kasımpaşa in 1845. SOURCE: BOA NFS. d 369.

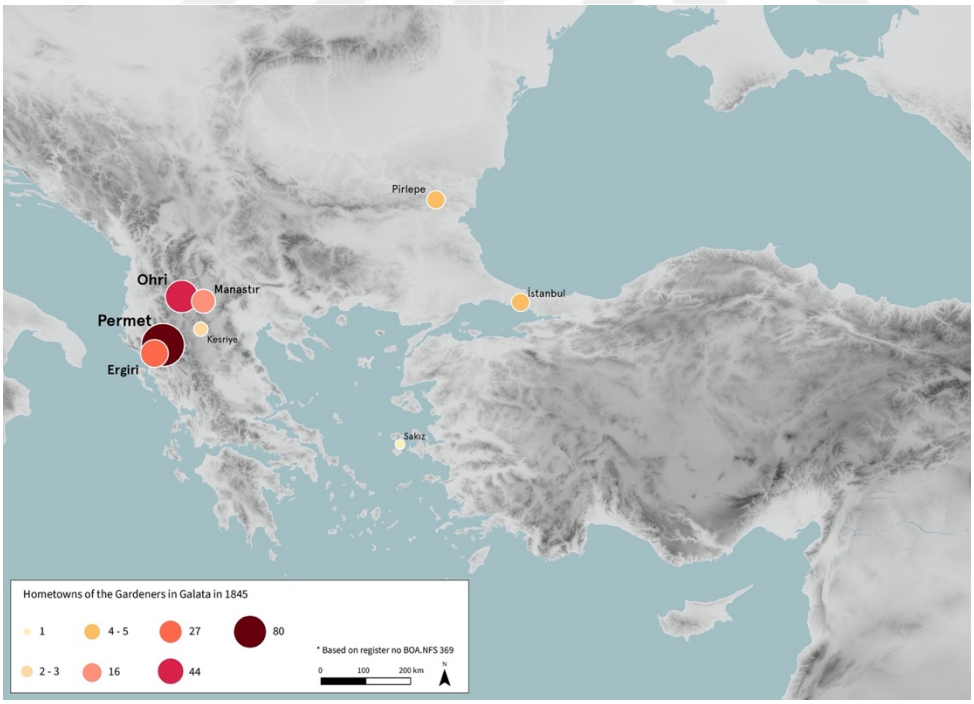


Figure 2.17 Hometown of the Gardeners in Galata in 1845. SOURCE: BOA NFS. d 369.

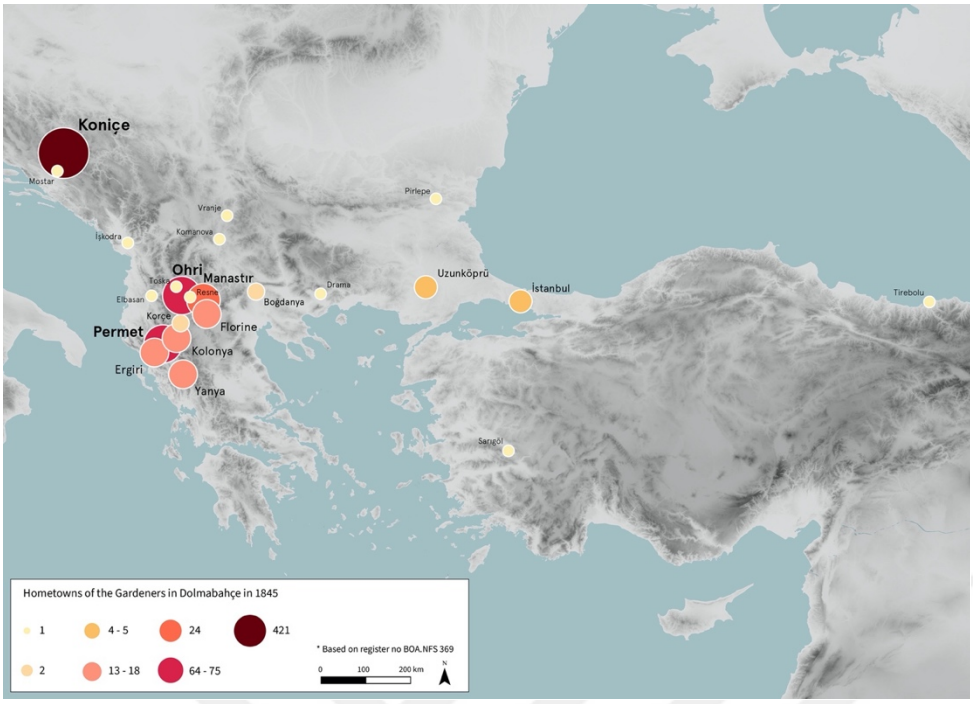


Figure 2.18 Hometown of the Gardeners in Dolmabahçe in 1845. SOURCE: BOA NFS. d 369.

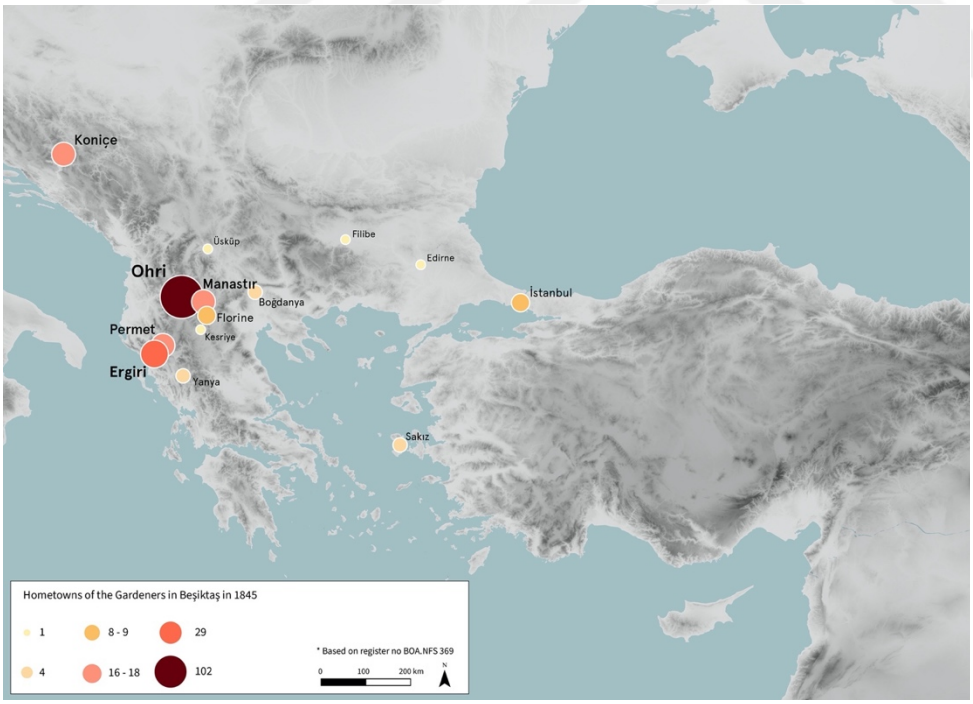


Figure 2.19 Hometown of the Gardeners in Beşiktaş in 1845. SOURCE: BOA NFS. d 369.

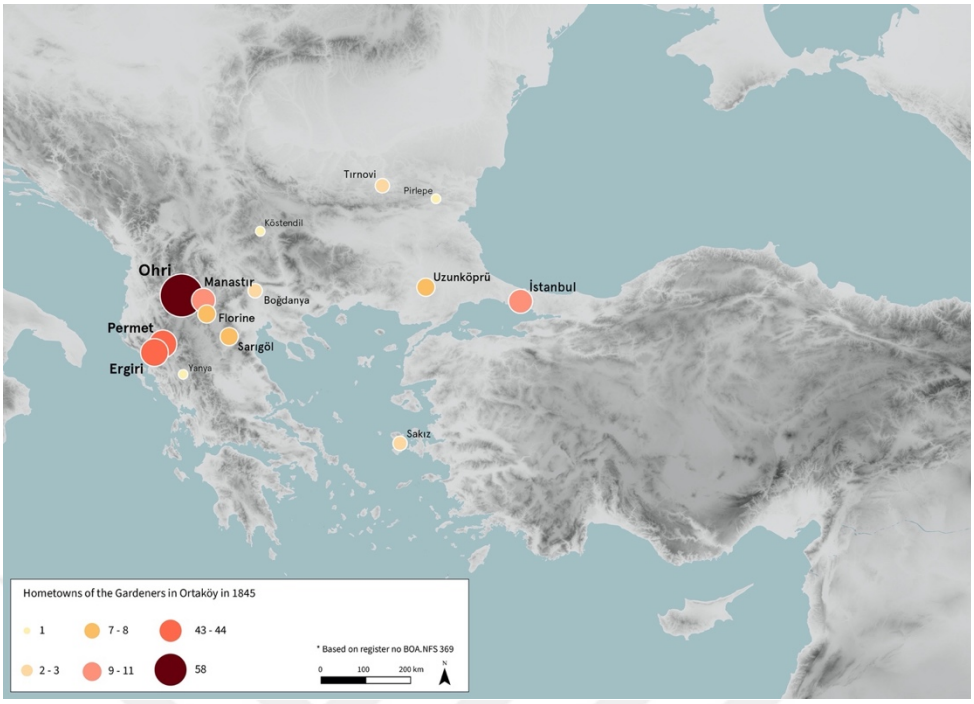


Figure 2.20 Hometown of the Gardeners in Ortaköy in 1845. SOURCE: BOA NFS. d 369.

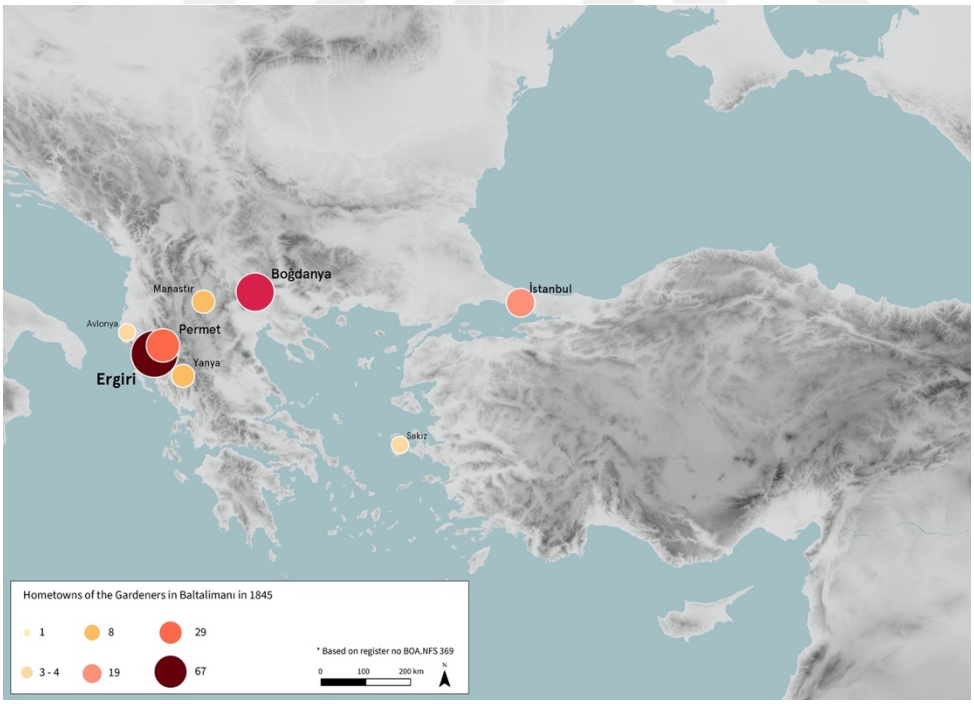


Figure 2.21 Hometown of the Gardeners in Baltalimanı in 1845. SOURCE: BOA NFS. d 369.

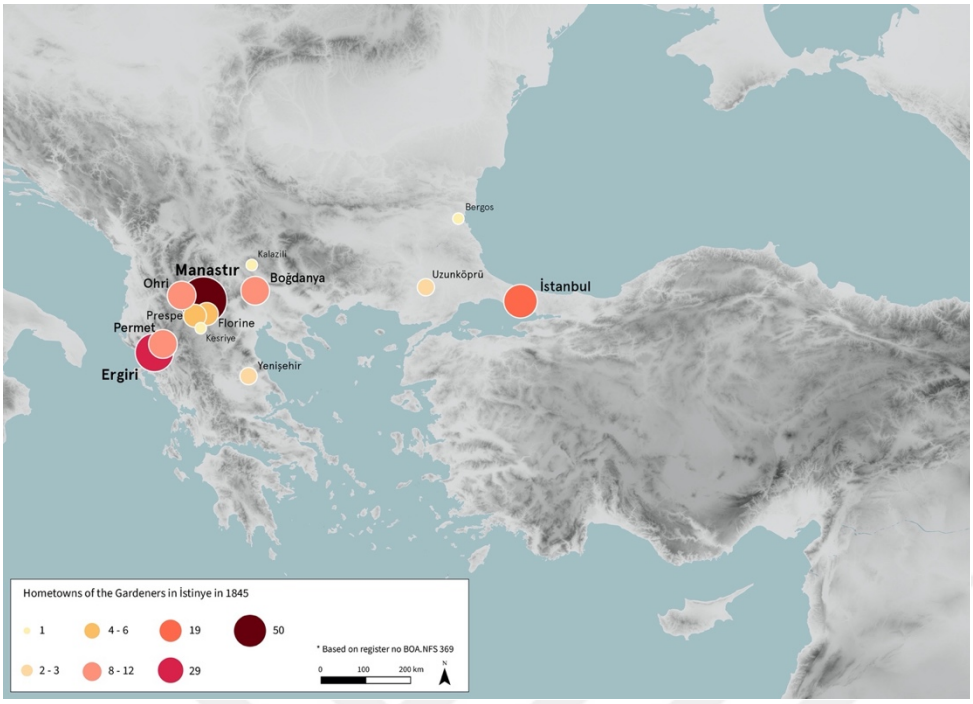


Figure 2.22 Hometown of the Gardeners in İstinye in 1845. SOURCE: BOA NFS. d 369.

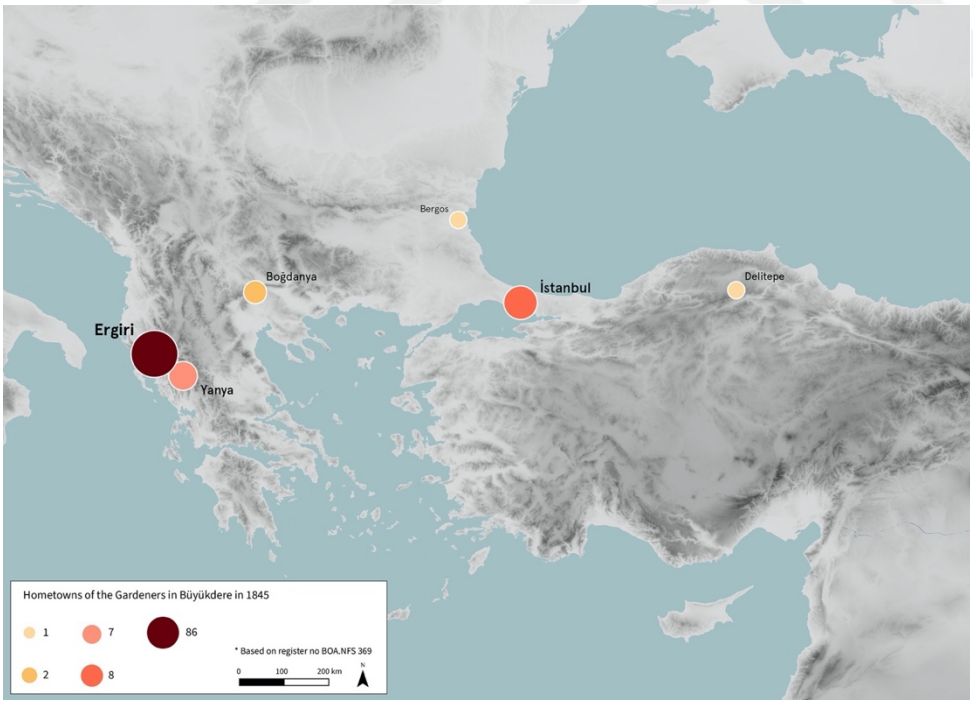


Figure 2.23 Hometown of the Gardeners in Büyükdere in 1845. SOURCE: BOA NFS. d 369.

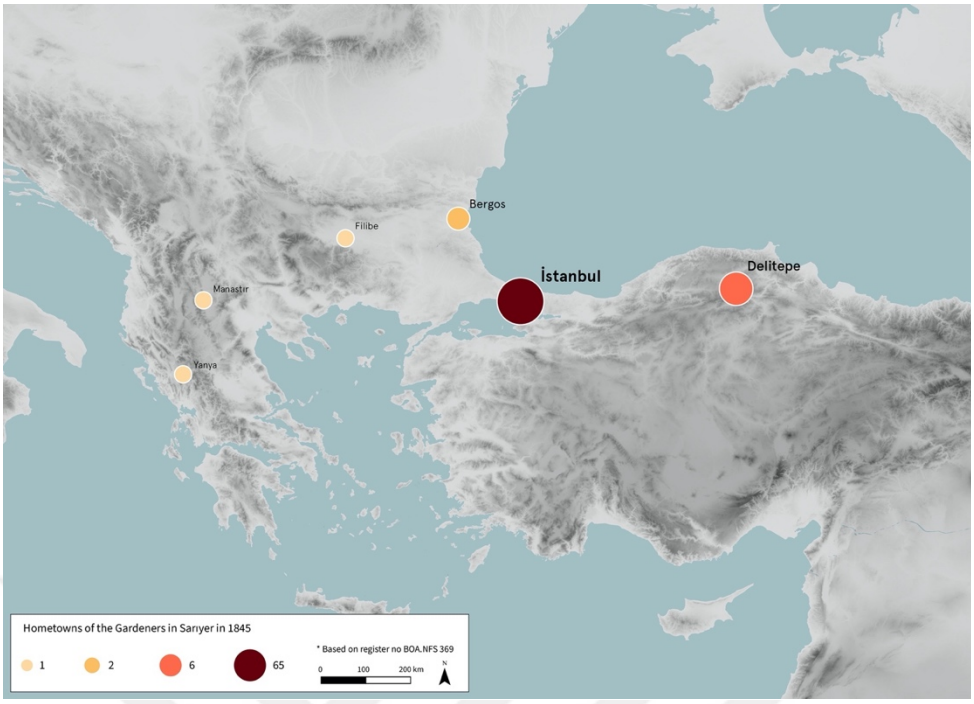


Figure 2.24 Hometown of the Gardeners in Sarıyer in 1845. SOURCE: BOA NFS. d 369.

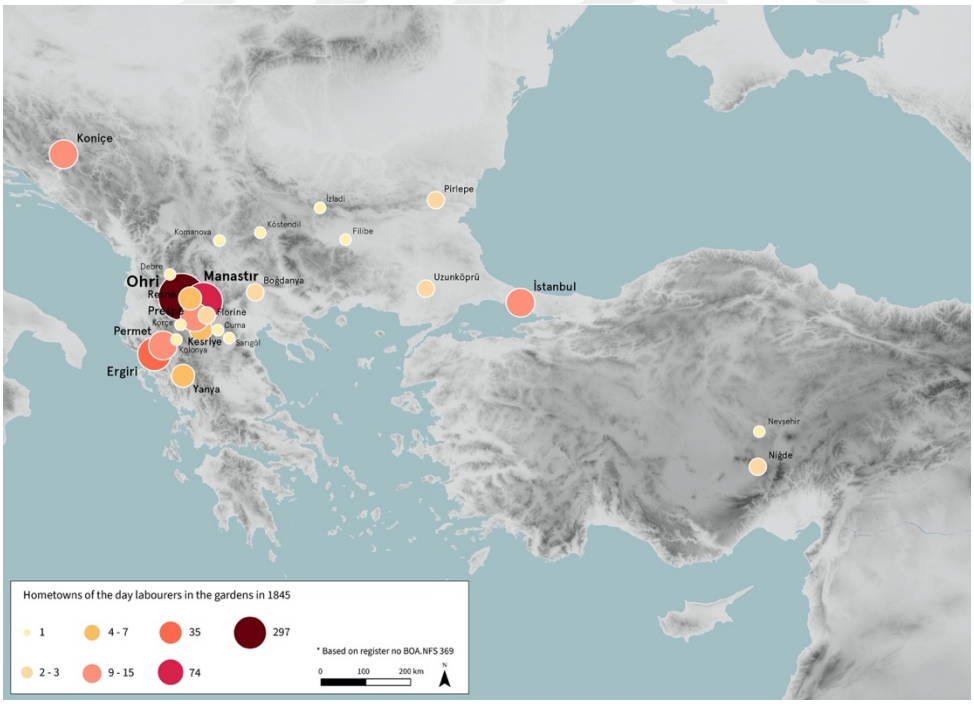


Figure 2.25 Hometown of the Day Workers in 1845. SOURCE: BOA NFS. d 369.

Each market garden had a master gardener who was responsible for supervising the other workers. As mentioned above most gardeners were young, unmarried men who worked seasonally. They generally lived where they worked or in coffee houses, like other unmarried men in Ottoman Istanbul. Their jobs changed with the seasons, and they could have different titles, such as *beşe* and *çavuş*, associated with the military or other professions. The authorities considered this group of unmarried migrant men to be a potential threat to the security of the city, so they registered them and monitored their entry, exit, and other activities within the city.

A market garden was usually managed by two partners who worked together and took turns traveling to their hometowns.

> Many artisans, as well as agricultural and garden workers employed on a daily wage basis in the city or its suburbs, would return to their hometowns after the feast of Ayios Dimitrios [November 8, marking the onset of winter] and return to Istanbul in the early days of spring.[53]

Gardeners usually worked alongside relatives or compatriots they brought with them from their hometowns. They often lived with their workers in makeshift huts in the middle of the garden. Adjacent to the hut was a barn and storage area for seeds and farm tools. In front of the hut, usually on the south–facing side, was a covered courtyard where vegetables were piled for market, seeds hung to dry, and baskets arranged for transportation.[54]

> It is surprising how the workers managed to rest in these disgusting rooms, where the stench and unimaginable filth repelled anyone who entered, even after working tirelessly in the gardens all day. Their diet was simple, consisting mainly of vegetables grown in the garden. To avoid the expense of meat, they often ate salted

53 Paspatis, *İstanbul'un Ortodoks Esnafı*, 50–51.

54 Ibid., 116.

fish, which was typically difficult to digest. Olives and olive oil were among their staples.[55]

Market gardens, a dominant feature of the urban landscape, were present in almost every settlement unit. As a result, Christian gardeners could be found in Muslim neighborhoods, despite the general tendency for Muslim and non–Muslim areas to be spatially segregated on religious grounds. Muslim neighborhoods, which were often more orderly and hygienic due to factors such as their location in topographically advantageous areas such as hills, allowed certain Christian artisans (e.g., milkmen, gardeners, bakers) to reside there. These individuals were generally healthier than their colleagues or co–religionists who lived in other areas.[56]

In theory, all adult males residing in the capital were officially required to register with a guild (*lonca*). Guilds united their members who practiced the same trade and were subject to similar economic and social conditions. The hierarchical structure of guilds consisted of master (*usta*), journeyman (*kalfa*), and apprentice (*çırak*), with the steward (*kethüda*) serving as the head of the guild.[57] The *yiğitbaşı*, as the representative of the workers, was responsible for maintaining their discipline and ensuring that the products were made according to certain standards[58] Migrant workers participated in the economic and social life of the city through networks based on country fellowship and guild membership. However, uncontrolled population growth led to the emergence of numerous street vendors engaged in illegal sales.[59]

In the Ottoman capital, migrants were not welcomed because they strained the city's resources of food, jobs, and housing and were perceived as a security threat.[60] As a result, authorities occasionally rounded

55 Ibid., 117.

56 Ibid., 24–25.

57 Mantran, *İstanbul Tarihi*, 249–250.

58 Halil İnalcık and Bülent Arı, "Türk-İslam-Osmanlı Şehirciliği Ve Halil İnalcık'ın Çalışmaları," Türkiye Araştırmaları Literatür Dergisi 6 (Eylül 2005): 50.

59 İnalcık and Arı, "Türk–İslam–Osmanlı Şehirciliği," 47; Faroqhi, *Osmanlı'da Kentler ve Kentliler*, 345.

60 Faroqhi, *Osmanlı'da Kentler ve Kentliler*, 328.

up and deported groups of unauthorized workers, whom they viewed as the primary source of the problem, especially during times of riot, fire, or famine.[61] Soldiers stationed at the capital's entry points, Bostancı in the east and Küçükçekmece in the west, checked the travel permits of those entering Istanbul from outside. The authorities sent those who arrived without a travel permit back to their place of origin.[62] However, this system only partially worked, as migrants used certain methods to evade military inspections, such as using alternative routes instead of main roads or bribing officials.[63] Authorities deported some of the migrants who arrived illegally, but most managed to stay.[64]

Market garden and vineyard workers, most of whom were seasonal laborers, had to obtain permission from their stewards to enter or leave the city. The steward of the gardeners (*bahçıvanlar kethüdası*) kept regular registers of the gardeners, ten of which have been studied under this subtitle, containing information such as their names, titles, marital status, places of origin, physical characteristics, and dates of arrival and departure from the city.[65] These arrangements, however, were far from perfect. In 1859, for example, a group of gardeners living outside the city walls in the Topkapı area were issued travel permits by the Küçükçekmece administration. These permits allowed them to return to their hometowns without having to apply to their stewards, which were in the Takıyyeci district outside Topkapı for vineyard workers and in Eyüp for gardeners.[66] In this regard, Ali Ağa, the Steward of Gardeners, stated in his petition that such practices not only contradicted the existing order but would also cause confusion in the regularly kept records. As a result, the matter was discussed in the Supreme Council (Meclis-i Vâlâ) and the

61 İnalcık, "İstanbul," *İslam Ansiklopedisi*, 234.

62 Noemi Levy-Aksu, *Osmanlı İmparatorluğu'nda Asayiş 1879–1909* (İstanbul: İletişim Yayınları, 2017), 80.

63 Suraiya Faroqhi, "Eyüp Kadı Sicillerine Yansıdığı Şekliyle 18. Yüzyıl 'Büyük İstanbul'una' Göç," in *18. Yüzyıl Kadı Sicilleri Işığında Eyüp'te Sosyal Yaşam*, ed. Tülay Artan (İstanbul: Tarih Vakfı Yurt Yayınları, 1998), 33–48.

64 Faroqhi, *Osmanlı'da Kentler ve Kentliler*, 328.

65 The ten registers examined above were kept by the stewards.

66 BOA. A.} MKT. UM. 348/44, 14 N 1275 (April 17, 1859).

opinion of the Municipality (Şehremaneti) was sought on the issue. The workers in the vineyards and gardens had to pay a labor tax to the Imperial Arsenal, as well as taxes and permit fees to the Imperial Treasury. When they came to Istanbul or before going to their hometowns, they had to pay these taxes and register. Thus, those who stayed in Istanbul were given craftsman's permits, while those who left the city received travel permits (*mürur tezkiresi*). However, most of the vineyard and garden workers who worked outside the city walls had been avoided this costly requirement by obtaining their travel permits from the Küçükçekmece administration. Such actions were against to public order and regulation and caused a loss to the state treasury. As a result, the complaint of the Steward of Gardeners was resolved by a decision of the Supreme Council and communicated to the Küçükçekmece Administration. According to the decision, from now on, vineyard and garden workers in Istanbul would be required to find a guarantor (*kefil*) to obtain their permits before starting work.

Gardeners usually organized their travel to the places where they worked in groups. In her work on the history of the Balkans, Jelawich describes that there were two main access routes they used:[67]

> The first followed the Danube basin to the Black Sea. The second started at the meeting point of the Danube and the Sava and followed either 1) the Morava, Nish, and Vardar valleys to reach the port of Thessaloniki, or 2) the Dragoman passage from Sofia to Plovdiv, Edirne, and finally Istanbul. Another side road was the "Via Egnatia", dating back to Roman times, which followed the route from Dyrrhacium (Dıraç), Apollonia (İşkodra) or Lake Ohrid to Thessaloniki. Water routes followed rivers such as the Danube and Maritza.[68]

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67 Barbara Jelavich, *History of the Balkans: Eighteenth and Nineteenth Century* (Cambridge: Cambridge University Press, 1999), 118.

68 Akdal, Market Gardens and Gardeners, 84–85.

For centuries, sea or land routes were preferred, but as transportation technology advanced in the nineteenth century, wagons were rented for travel.[69]

Due to security concerns, the monitoring of gardeners entering and leaving Istanbul became increasingly strict over the years. Especially during the Russo–Turkish War of 1877–1878, the arrival of the Slavs at the gates of Istanbul caused fear in the Ottoman administration.[70] As a result, Bulgarian gardeners and workers were placed under strict surveillance. For instance, in 1905, the Grand Vizierate (Sadaret) informed the Ministry of Police about the complaints of craftsmen of Bulgarian origin from the Vilayet–i Selase (Salonika, Kosovo and Bitola), such as milkmen and gardeners, who had obtained travel permits to work in Istanbul but were sent back.[71] According to the Grand Vizierate, people without criminal records should be allowed to work in Istanbul. Issuing travel permits to these individuals and then not allowing them to leave was contrary to customary practice. While the return of suspicious gardeners and others was considered necessary, it was unclear why those from these regions should not be accepted. The state security services carried out serious investigations into which gardeners were criminal and which were not.

Another example illustrates both the extent of the security measures taken against the gardeners and the high mobility of the gardeners themselves. For example, in 1907, Petro Naum, a gardener from the Bulgarian community living in the village of Yankofça, Resne district, wanted to visit his sick brother, Yorgi Naum, who was also a gardener.[72] For this reason, he had applied for a travel permit to go to Istanbul. The Aksaray Central Police Commissariat reached Yorgi Naum, the owner of the market garden in Molla Fenari Mahallesi, and took his statement:

– Who is Petro Naum? Who is it that you want to come to Istanbul?

69 BOA. DH. MKT. 520/20, 2 Ra 1320 (June 9, 1902).

70 The migration caused by this war and its spatial impact on Istanbul are discussed in the following chapter 3.

71 BOA. BEO. 2591/194292, 30 Ra 1323 (June 4, 1905).

72 BOA. ZB. 20/80, 17 M 1325 (March 2, 1907).

– He is my older brother.
– When did Petro leave Istanbul for his hometown?
– Petro was here two and a half years ago when I was in my hometown. He got sick. He wrote me a letter. When I arrived, I found him sick. After treating him for a while in the Italian hospital, I sent him back to the village for a climate change (*tebdil–i hava*).
– How long have you been going back and forth to Istanbul?
– We have been working in these gardens, inherited from our father, since we were children. My brother Petro and I take turns coming here and returning to our hometown.
– Why are you requesting Petro's arrival?
– I have been suffering from stomach problems for some time. The doctors recommend that I go to my hometown. Petro has recovered, but the local authorities did not allow him to get a travel permit to come here. He wrote to me, and I submitted a petition to the appropriate authority here so that he could come.
– Do you or Petro have any criminal record?
– Absolutely not.
– Confirm and sign your statement!
– I confirm.

This example confirms, in parallel with Paspatis' research, that gardeners, like other professions working in the open air (such as shepherds, farmers, tanners, etc.), were among the groups most prone to disease.[73]

In addition to restrictions on travel and difficult working conditions, gardeners had to pay high taxes and expenses. First, they had to pay daily wages for labor. They had to obtain a work permit every year in order to employ workers. For this, they paid a certain fee to the tax officials based on the qualifications (*usta, kalfa, çırak*) of the workers they planned to hire. Under normal circumstances, servants (*yanaşma*) were not

73 Paspatis, *İstanbul'un Ortodoks Esnafı*.

required to pay a permit fee.[74] In addition, gardeners had to pay substantial taxes to the state treasury and the municipality. Unlike farmers, who were not taxed for keeping a single pair of animals for agricultural use, the authorities levied a revenue tax (*temettü*) and a municipal tax (*belediye resmi*) on the animals that gardeners kept in the wells of their gardens.[75] The administration valued gardeners differently from farmers because they used their animals for garden work, such as turning water wheels, plowing gardens, fertilizing, as well as for transportation. According to Article 12 of the Istanbul Municipal Tax Law (İstanbul Şehri Rüsum–ı Belediye Kanunu), since 8 April 1912 (1328 Rumi), gardeners had to pay the same tax as other groups of merchants in the city who owned animals. According to Article 12, taxes were levied on animals used for transportation and carts engaged in commercial activities because they caused damage to the city's sidewalks and similar infrastructure. In this regard, gardens were considered to be any other commercial establishment within the city. In addition, the municipality also levied a daily tax, known as the entry fee (*duhuliye*), on every cart and animal at the city gates. The entry fee was a long–standing tax levied by the Kantar İdaresi (which administered the weighing of goods, customs and weighing operations) on carts and animals loaded with hay, wood, coal and similar goods entering the city from outside the walls (from Makriköy and Ayastefanos), including those belonging to immigrants. Another tax was the stamp tax (*pul resmi*), which was collected from every boat loaded with vegetables that arrived at the old fruit and vegetable market in Eminönü from regions such as Boğaziçi, Kadıköy and Alibeyköy. The stamp tax was a tax collected through stamps affixed to boats and ships at the first dock they stopped at. These boats, ships and similar vessels could visit other docks with the stamp they had purchased if they could not sell their goods at the first dock they stopped at. This tax was levied on boats loaded with vegetables and fruits and on sea vessels arriving at the docks with goods such as wood and coal, with different amounts

74 BOA. A.} MKT. DV. 162/87, 2 Z 1276 (June 27, 1860).

75 BOA. DH. MKT. 849/89, 24 S 1322 (May 10, 1904).

depending on the type of vessel.[76] In addition, *arziyye resmi* (a tax levied on areas such as docks used for loading and unloading goods during commercial activities) was collected from every basket of vegetables and meat brought to Eminönü Square, whether it arrived by land or sea. According to tradition, this tax was levied on temporary goods such as carrying baskets (*küfe*) in the squares owned by the municipality (e.g. Eminönü–Sirkeci Square).[77] Merchants who wanted to sell their products in the marketplaces also had to pay a *pazar resmi*. This fee, which was collected from the merchants, also covered the removal of the rubbish (*süprüntü*) they left behind.[78]

Finally, for a long time the owners of market gardens in and around the city had to pay a labor tax (*amele vergisi*) to the Imperial Arsenal. However, after the new cadastral survey (*tahrir–i cedid*) carried out at the end of the nineteenth–century, these taxes were abolished for the gardens inside the city and certain regions outside the city walls. Instead, land taxes were levied on these gardens, varying according to the value of the land.[79] Many gardeners preferred to pay land taxes (*arazi vergisi*) rather than the tithe (*aşar*). According to the tithe regulations of 1895 (1312 AH), 1903 (1321 AH), and 1908 (1326 AH), the following agricultural products were exempted from the tithe: vegetables that could not be renewed after losing their freshness and could not be pickles, and crops such as mallow, lettuce, leek, and spinach, which were not considered to be garden produce. However, the tithe did apply to vegetables that could be pickled and preserved for long periods of time, such as pumpkin, okra, artichoke, onion, garlic, carrot, turnip, and tomato.[80] Also, in towns and villages, the tithe was not levied on the produce of plots of land smaller

76 BOA. DH. UMVM. 110/37, 16 B 1332 (June 10, 1914); BOA. ŞD. 3118/52, 16 R 1332 (March 14, 1914).

77 BOA. ŞD. 2927/17, 19 Z 1305 (August 27, 1888).

78 BOA. BEO. 395/29558, 25 L 1311 (May 1, 1894).

79 The question of how much tax should be collected from gardens in each region outside the walls is examined in the final section of Chapter 3.

80 Tithe Tax Regulations, Article 3. See. Aşar Nizamnamesi, Dersaadet Matbaa–i Osmaniyye, 1305 (1887–1888), 1312 (1895), 1321 (1903), 1326 (1908).

than an old decare (*atik dönüm*) (equivalent to 918.7 square meters) that were attached to houses and separated by walls.[81] In Istanbul, the tithe was generally collected from some of the market gardens located outside the city walls, such as those in Küçükçekmece, Büyükçekmece, and the region between Bostancı and Pendik, among others.[82]

In some cases, however, the administration has taken the initiative to implement local and hybrid practices with regard to the taxation to be applied. The taxation methods of the market gardens in Kartal provide interesting information on this subject.[83] The Municipality reported that gardeners in the Kartal district were suffering significant losses due to the tithe collection method. The authorities had reformed the practice somewhat, and for the past 4–5 years have collected the tithe after deducting 30% of the cost of the harvest. However, the significant increase in fertilizer, labor wages, and other expenses required to grow crops made this reduction insufficient. The gardeners, who complained about this situation, demanded the application of a method in some areas of Izmit, Çatalca and outside the walls of Istanbul where the authorities collected taxes based on the value of the land instead of the tithe from the gardens. The Municipality emphasized the need to evaluate the taxation of market gardens and fields separately in the region.

§ 2.3 Water, Animal Power, and Waste Problem

In addition to paying taxes, gardeners needed to cover other costs to run the garden, such as water, animals, fertiliser and tools. The most important of these tasks was providing manure. Second was the regular watering of the vegetables. Manure nourished the soil, enabling the

81 Tithe Tax Regulations Article 2. See. Ibid.

82 The type of tax levied on vegetables indirectly defined the boundaries of the city. An illustrative example of this is given in the last section of Chapter 3.

83 BOA. DH. MKT. 2865/51, 6 Ca 1327 (May 26, 1909).

vegetables to absorb its nutrients with the help of plenty of water.[84] Another important input for growing vegetables was water. Rainfall alone could not provide enough water for this. Even in the wettest climates, rainfall is not uniform. Water suitable for irrigation was clean, aerated, free of lime and warm. River water, for example, was suitable for irrigation because it was aerated, warm and clean. No further aeration or settling was required. However, spring water (including well water) was less suitable for direct irrigation because it was cold and lacked air. Wells were generally dug to a depth of 5 to 10 meters. The deeper the well, the colder and more chemically laden the water would be, which is why they were not dug any deeper. Gardeners stored the water drawn from the well in shallow, wide pools to aerate and warm it. After a day in the pool, the water would warm up. Using well water directly could damage vegetables. Using sewage water for irrigation was an old method as it provided both water and manure. Sewage should be used in such a way that it seeps into the soil, as contact with vegetables could make consumers ill due to the germs it contains.[85]

The garden owners did not have to pay a fee for running water that passed through or beside the gardens, unless the water came directly from a spring or other natural source.[86] In many cases, the sale of gardens

84 The fact that it takes on average half a tonne of water to produce one kilogram of vegetables shows just how important water is in vegetable production. See. Ege, *Umumi ve Hususi Sebzecilik*, 41–42.

85 Ege, *Umumi ve Hususi Sebzecilik*, 42–46. This issue is discussed in detail in Chapter 6.

86 In 1909 (1327 AH), there was a series of correspondences between the Çatalca Governorate (Çatalca Sancağı) and the Ministry of Finance (Maliye Nezareti). Several market gardens in Çatalca were put up for auction with prices set by the Çatalca administration. However, the potential buyers were reluctant to participate in the auction without knowing the cost of the water flowing through these market gardens in order to avoid any surprises later. According to the information received, the State Property Office (Emlak-ı Emirriye Müdürlüğü) stated that these gardens had been benefiting from this water for a long time. Therefore, the price determined in the auction had no relation to the water flowing through them. In other words, the price was inclusive. See. BOA. ŞD. 690/36, 3 N 1296 (August 21, 1879).

included trees, running water sources, and wells.[87] Most market gardens had wells. Water was drawn from these wells using wooden or zinc buckets attached to large wooden water wheels. The water was then channeled into ponds or directly into wooden canals lined with tar, from which it was directed to the fields. The water needs of the vegetables during the long summer days could not be met by a pair of horses attached to these wheels. Therefore, the gardeners kept two pairs of animals and used them alternately for the work. What is more, donkeys, horses, and mules were commonly used in the cultivation and transportation. Until the advent of the automobile in the early twentieth century, horses and donkeys were the only means of transportation in urban areas.[88] They were also commonly used for hauling and construction.[89]

It was common to see barns and manure piles on almost every street in the city. Although these manure piles created sanitary problems, they often functioned as part of the city's metabolism and ecosystem. The manure was the most important component of the extensive vegetable production that took place in cities. Especially in gardens where commercial agriculture was practiced, success was only possible with abundant manure and plenty of water. For the same amount of land, vegetable production yields five to six times more than general agriculture. In addition, the amount of nutrients extracted from the same soil by vegetables was higher than by cereals. As a result, a wide variety of organic fertilizers were used in vegetable production. For example, manure from animals (such as horses, cows, mules, etc.) was called farm manure (*çiftlik*

87 Styliani N. Lepida, "Bir Osmanlı Vilayetinde Su İdaresi Meselesi: 17. Yüzyılda Kıbrıs Örneği," in *İktidar Tohumları: Osmanlı Çevre Tarihi Üzerine İncelemeler*, ed. Onur İnal and Yavuz Köse (İstanbul: İletişim Yayınları, 2022), 171–192.

88 The common belief, steam–powered machines and other technological developments did not eliminate the need for animals in the late nineteenth century. On the contrary, population growth and urban mobility led to an increase in the number of pack and cart animals, and with more animals came hygiene problems. See. Clay McShane and Joel Tarr, *The Horse in the City*," 36–56.

89 M. Emir Küçük and Onur İnal, "Antroposentrizmin Ötesinde: Türkiye Modernleşme ve Kent Tarihinde Çalışan Hayvanlar," in *Ekoloji Bir Arada Yaşamın Geleceği* (İstanbul: Can Yayınları, 2022), 399–425.

gübresi).[90] The gardener could get this manure from the animals in the garden or buy it from outside. As the manure produced by the animals in the garden was usually insufficient, gardeners sought ways of obtaining it from outside sources.[91] The gardeners would get their manure from the city's stables, whether they belonged to ordinary citizens, private companies or military and government institutions. In this way, the needs of the gardeners were met and the city's waste balance was maintained.

For example, A series of correspondences took place between 1900 and 1901 regarding the manure purchased from the Selimiye Barracks (Selimiye Kışlası) for a grove in Validebağ.[92] The document provides details about the trade of commercial organic waste between institutions. According to these correspondences, the Imperial Stables (Istabl-ı Amire) was contacted for 500 carts of manure needed for Validebağ, which was under the the Sultan's Private Treasury (Hazine-i Hassa Nezareti). However, since the manure of the animals in the Imperial Stables was auctioned off to the highest bidder, it seemed unlikely that Validebağ would be able to obtain the manure it needed. As a result, a request was made to the Üsküdar Regional Command (Üsküdar Ciheti Kumandanlığı) for manure from the animals of the Artillery Regiment (Topçu Alayları) to meet the needs. After receiving permission from the Imperial Cannon Foundry (Tophane-i Amire Müşiriyeti), the Üsküdar Regional Command prepared five hundred carts of manure to be sold for a fee.

There were also situations in which the urban metabolism was clogged, i.e. manure could not be integrated into the urban ecosystem, and a crisis of urban hygiene broke out. In a document sent to the Ministry of Interior by the Municipality's Council of Civil Medicine and Public

90 In addition to farm manure, bird and poultry manure was also used. These were fertilizers very rich in nitrogen. As they could burn the vegetables if used hot, they were preferably left to stand before use.

91 Each decare of market garden required an average of 5,000 kilograms of manure per year.

92 BOA. ML. EEM. 374/71, 19 Ra 1319 (June 27, 1901). See also. BOA. ZB.26/67, 18 B 1325 (August 27, 1907).

Health (Şehremaneti Meclis-i Tıbbıye-i Mülkiyye ve Sıhhiye-i Umumiye), it was mentioned that the peace and health of the residents of Feridiye neighborhood were threatened by the dumping of manure from both private and military stables in Talimhane Square.[93] For this reason, on 4 August 1910, the residents had even submitted a petition with the signatures of 70–80 people to the Municipality. According to the residents, the issue was not only a local matter concerning their health, but also a significant concern for the overall public health of the city. In fact, the previous administration had allowed the construction of many barns on the side of Büyük Cadde bordering the Feridiye district. Manure from both civilian and military barns was continuously dumped on the square with handcarts from dawn to dusk. It was impossible to escape the flies and the stench of these manure piles, which formed hundreds of mounds, especially on hot summer days. In view of the danger of cholera, the inhabitants, who were convinced that the rules of hygiene should be strictly observed, asked the municipal authorities to appoint a health inspector to carry out an investigation. As a result, the petition expressed the demand of the residents to remove the private barns and to dispose of the manure accumulated in the military barns in more distant areas. As a result, the issue was referred to the General Inspectorate of Public Health (Hıfzıssıhha Müfettiş–i Umumiliği). The inspector's report confirmed that the manure accumulated in the barns threatened the health of the residents. He emphasized that the presence of such barns and manure piles in the crowded city center was inappropriate for public health. It stressed the need to inform the relevant authorities about the relocation of these barns outside the city. As a result, the municipality informed the Beyoğlu Municipal Department (Beyoğlu Belediye Dairesi) to take the necessary measures in this regard. However, since the barns in question also belong to the military, the municipality could not intervene and recommended that the military be contacted for action. The manure crisis in this area (Taksim Barracks and its surroundings) intensified after the First World War. The gardeners in the Bosporus area, such as those in

93 BOA. DH. MUI. 129/13, 4 N 1328 (September 9, 1910).

Ortaköy, were eager to take the manure, provided that it was transported to them. However, the topographical location of the Taksim area, which was on a hill, and the difficulty of access to this area contributed to the crisis. Therefore, transporting the manure to the gardens, although free of charge, was not enough to solve the crisis.[94]

The administration often had to reconcile the needs of the gardeners with the complaints of the public, the most common being the smell of the manure piles. The transportation of manure from Havuzbaşı Pier, which is located between Beylerbeyi and Çengelköy, disturbed the owners of the mansions (*yalı*) near Çengelköy. They asked the authorities to prohibit this activity. In their petition dated 4 July 1861, the 14 holders market gardens in Çengelköy stated that they had been using the Havuzbaşı pier for sending vegetables and transporting manure for a long time (*min–el kadim*). They also stated that there was no suitable place for transportation other than the pier.[95] The gardeners stated that they regularly paid their taxes to the Imperial Arsenal every month and added that stopping the transportation of manure from the pier, contrary to customs, would put them in a difficult position. In this regard, the authorities sought the opinion of the Gardeners' Guild (*bahçıvan loncası*), which stated that the quick transportation of the manure piles to the market gardens would eliminate the unpleasant smell and appearance that the residents complained about.

The use of fertilizers, along with water and labor, was a crucial issue in vegetable production. The Geoponika, a manual of Byzantine agriculture, highlights several methods by which various fertilizers, including human feces, could be used in agricultural production. According to this centuries–old source, the droppings of almost all birds, except geese, helped moisten the soil. Among them, pigeons were the best. After pigeon manure, according to many sources, came "human manure," which was especially good at killing harmful weeds. Human manure was preferred, especially in vineyards. Donkey, goat, sheep, cow, horse and mule manure

94 BOA. ML. EEM. 1295/12, 19 B 1337 (April 20, 1919).

95 BOA. A.} MKT. NZD. 359/78, 25 Z 1277 (July 4, 1861).

followed. Geoponika recommended that farmers leave the manure on the land for several years to prevent pests and diseases.[96] However, human feces still carried a high risk of containing microbes that could cause infectious diseases such as typhoid or cholera.[97]

Urban waste, including household garbage, animal remains and similar materials, was used as fertilizer in the gardens. These materials were piled in an open area to decompose naturally over the years. Once decomposed, the resulting mixture, which resembled animal manure, was sifted by gardeners to remove impurities such as glass and stones before being applied to the gardens. This practice played a role in the functioning of the urban metabolism. In addition, the blood accumulated in the slaughterhouses was collected in barrels and taken to the gardens. A hole was dug in the garden and the blood poured into it. A layer of soil, together with a little lime, would be added to the top. After three or four months, the fertilizer would turn into black soil. In addition to urban waste, it was also possible to make fertilizer (compost) from the waste produced by the gardens themselves, such as vegetable roots, kitchen waste, leaves, animal remains, etc.[98]

§ 2.4 Concluding Remarks

This chapter has provided an overview of Istanbul's urban agricultural system in relation to human and non–human actors and topography. As one of the dominant elements that shaped the fabric of Ottoman Istanbul and gave the city a semi–rural character, market gardens played an important role in both its socio–economic structure and urban metabolism. The reason for this proximity was threefold. First, perishable food had to

96 Yunus Koç, "Bizans Tarımının El Kitabı ya da İlk Tarım Ansiklopedisi: Geoponika," *Kebikeç*, no, 24 (2007): 54–55.

97 As will be discussed in detail in later chapters, the direct or indirect use of human feces in Istanbul's market gardens continued until the end of the 1930s. In this period, gardens irrigated with polluted water that flowed into the city's streams created a dangerous environment for the emergence and spread of various diseases.

98 Ege, *Umumi ve Hususi Sebzecilik*, 33–35.

be transported quickly to the market. Second, both producers and consumers needed to keep track of the rapidly changing vegetable market. Third, the city was a significant source of manure and organic waste. Although the market gardens were almost a self–sustaining ecosystem, they required large amounts of fertilizer, some of which came from stables, sewage and urban waste. These gardens were not only important for the metabolism of the city, but also played a crucial role in its socio–economic structure as a profitable industry with thousands of migrant workers. They were considered as the food–producing workshops of the city. The clearest evidence that market gardening was considered a prohibited occupation and categorized as one of the city's crafts by the authorities is its detailed documentation in population and guild registers.

The main purpose of these registers was to survey the migrant single male population working in the city. The ten registers examined in this section cover different times and places, allowing for temporal and spatial comparisons of both market gardens and the workers employed in them. According to these registers, the number of gardens inside the walls remained approximately the same, while the number of gardens outside the walls increased over time. In addition, the 1793 register also lists the gardens and gardeners of the Çatalca area, located on the western edge of the city, which provides valuable information as the next chapter looks at the westward direction of the city's growth in the late nineteenth century. The registers also show that there was a significant difference in the number of gardens between the western and eastern shores of the Bosporus. The relatively small number of market gardens on the western shore could be due to the scarcity of rivers, steeper terrain that slopes towards the sea and slightly lower temperatures.

Among the ten registers examined in this thesis, the 1845 register, which focuses on the gardens of the northern Golden Horn and the western shores of the Bosporus (Sütlüce-Sarıyer), is of particular importance. This register, created after the reign of Sultan Mahmud II, one of the key figures in the Ottoman modernization movement, provides more systematic information about the gardens and gardeners. Unlike the other registers, this one also provides information on the following items: 1) The

churches to which the gardeners in the registers were members. 2) The taxes that had to be paid for the gardens. 3) and the exact age of the gardeners and other workers (in earlier registers the age of the gardeners could only be inferred from the adjectives given to them, such as 'boy' or 'elderly'). The register also allows some spatial comparisons to be made. Unlike the gardens mentioned in the other registers, the gardens in this area had a significantly higher number of gardeners. When the number of workers is compared with the number of gardens, it appears that the largest gardens in the city were located in this area, particularly around Kasımpaşa and its surroundings. In addition, as this register covers each neighboring settlement (village) separately, from Sütlüce to Sarıyer, it reveals the spatial differentiation of both the gardens and the gardeners: Firstly, while the number of gardens and gardeners is declining in some settlements, it is increasing in others, in a rhythmic pattern. This situation can be explained by the fact that some river valleys are wide, where there are more gardens and gardeners, and others are narrow, where there are fewer. Secondly the hometowns of the gardeners in the region (most of whom came from the Balkan provinces) and their religious affiliations (most of whom were non–Muslims) vary spatially between neighboring villages. For example, while gardeners from Ohri, Manastır and Permet were concentrated in some villages, those from Ergiri were more prominent in others. Furthermore, the majority of gardeners registered in Dolmabahçe were Muslim, although most gardeners were non–Muslim. Similarly, by 1827, the majority of gardeners within the city walls identified themselves as Istanbulites. The reason may be that both regions had administrative functions. These records show that market gardens were widely scattered throughout the city, were numerous and varied in size, and that the distribution of gardeners also took place within complex networks of local (fellowship, etc.) ties.

The system depicted here was transformed in the late nineteenth and early twentieth centuries. In this chapter, it is briefly mentioned that despite the ban on building and establishing neighborhoods in this area without state permission, there was a movement in the western periphery of Istanbul (the Çatalca region) from the eighteenth century onwards.

The next chapter examines the causes of the wave of immigration to the city following the Ottoman–Russian War of 1877-1878, including urban growth and its spatial impact. The following two chapters, covering the late nineteenth century, deal primarily with the issue of urban boundaries, briefly raised in this chapter, through taxation, with particular emphasis on the effects of rapid urban growth.

3

Depth and Breadth of Outward Urban Growth: Migration, Industry, and Agriculture in the late Nineteenth–Century

In the late nineteenth century, the Ottoman Empire experienced extraordinary population increase. This created two problems that were directly related: housing and food. The scarcity of these two basic needs fostered rapid and uncontrolled urban growth and sprawl. This chapter examines the dynamics of "urban growth"[1] and the expansion of the "urban boundary"[2] that took place in the western periphery of the city during the late nineteenth–century. In this period, the western outskirts of the city formed a development zone "between the settled urban area and the open rural landscape," while at the same time serving as a transitional

1 Wide in scope, the concept of urban growth has had various uses in the literature. In the most basic sense, the concept is utilized in analyzing why and how cities grow. However, the approaches to growth are nuanced in their emphasis, being associated with demographic change, spatial expansion, urban sprawl, economic transformation, and infrastructural development. The concept has also been explored in relation to the environmental impacts of growth and the socio-economic inequalities it creates.

2 The concept, which refers to the line that defines the physical or administrative limits is discussed further in the next chapter (Chapter 4).

green zone that complemented the city's needs for food and recreation.[3] Here, as new land was opened up for agriculture, new factories and workshops sprang up, new military installations, railroads and logistics services were built, and new neighborhoods were created for the workers and immigrants who flocked to the border.[4] Introducing the overarching themes of this dissertation, namely the urban–rural relationship and the urban boundary, this chapter analyzes the impact of this rapid urban growth of the late nineteenth–century in Istanbul in the light of these concepts.

§ 3.1 Historical Growth Trend of Istanbul

In the fifteenth and especially the sixteenth centuries, the city developed through the construction of complexes (*külliye*) by the palace elite and high–ranking statesmen. However, these urban investments were mainly directed to the already "empty" spaces of the walled city, which expanded towards agricultural areas. For example, during the reign of Beyazid II (1447-1512), settlements from Fatih and Aksaray expanded into semi–rural agricultural areas near the city walls, as six new districts were established here in response to economic development. In this period, the city developed within the existing walls, with only the Eyüp district expanding outside the walls, while in the Galata region this expansion was realized with the construction of Tophane.[5]

In the sixteenth–century, the city's population increased significantly, mainly for economic reasons. In addition to many merchants and craftsmen, young unemployed men and poor families from the impoverished

3 See. Turan Açık, "Osmanlı Şehri Neresi?," 77–97; Baber Johansen, "The all-embracing town and its mosques: al misr al gâmi," *Revue des Mondes Musulmans et de la Mediterranee* 32 (1981): 139–161.

4 İlhan Tekeli, "Tanzimat'tan Cumhuriyet'e Kentsel Dönüşüm," in *Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedisi*, vol. 4 (İstanbul: İletişim Yayınları, 1985), 878–890.

5 Nilgün Kiper, "Osmanlı İstanbul'unda Kentsel Mekanın Değişim Süreci," in *Antik Çağdan XXI. Yüzyıla Büyük İstanbul Tarihi*, vol. 1 (Istanbul: İstanbul Büyükşehir Belediyesi Kültür A.Ş Yayınları, 2015), 432.

regions of the empire began to come to Istanbul in search of work. Those from Anatolia and the Balkans (especially Albania and Bulgaria)[6] mostly worked illegally in the city, often as gardeners, porters, boatmen, etc., usually on a seasonal basis. The migrants settled in the districts surrounding the city, such as Kasımpaşa and Eyüp. In these migrations, rural push factors (such as high taxes, security concerns, etc.) were more influential than urban pull factors. In order to prevent rapid population growth, bachelor quarters were strictly controlled.[7] The settlements in the Galata district expanded towards the Golden Horn and the Tophane ridges, creating the regions of Fındıklı, Cihangir and Kasımpaşa. Important military structures (such as the Imperial Arsenal and the Imperial Cannon Foundry) were revived during this period. Until the seventeenth century, the development of Istanbul continued mainly within the city walls (an area of 17.2 kilometers squares). During this period, walled Istanbul consisted of neighborhoods clustered around mosques. These neighborhoods were separated by market gardens and pastures. The city also had open fields for fairs and military exercises. At the same time, a process of small–scale urbanization began in the city as certain activities (tanneries, cemeteries, gardens, slaughterhouses, potteries) were moved out of the city for reasons of health, cleanliness and fire risk.[8]

By the seventeenth century, the city's population density had increased significantly. This growth was accompanied by an increase in the number of major fires and outbreaks of disease.[9] The development of walled Istanbul slowed down and reached a saturation point in the seventeenth century. The city, which had been largely confined within the walls, began to expand outward in a more pronounced manner. During this period, urban investments were made in settlements outside the city

6 It refers to the almost current borders of Albania and Bulgaria.

7 İnalcık, "İstanbul," *İslam Ansiklopedisi*, 220–239.

8 İlber Ortaylı, "İstanbul'un Mekansal Yapısının Tarihsel Evrimine Bir Bakış," *Amme İdaresi Dergisi* 2, no. 10 (1978): 91; İnalcık, "İstanbul," *İslam Ansiklopedisi* 227; Yunus Koç, "Fetihten Öncesinden Cumhuriyet Dönemine İstanbul'un Nüfusu," Türkiye Araştırmaları Literatür Dergisi 16 (2010): 171–199.

9 Kiper, "Osmanlı İstanbul'unda Kentsel Mekanın Değişim Süreci," 432.

walls, such as Galata, Üsküdar and the Bosporus villages.[10] However, despite this expansion, it is safe to conclude that the spatial structure and hierarchy of traditional Istanbul, the so–called "Metropolis Mundi", did not undergo a fundamental change until the eighteenth century.[11]

The social, economic, and political topography of the city underwent significant changes during and after the eighteenth century. The most interesting aspect of the changes during this period was the tendency of the city to expand beyond its traditional boundaries. This process was largely accelerated and encouraged by state officials and the elite. The mansions (*yalı*) built on the shores of the Bosporus and the villas in other suburbs of the city were characteristic of this period. Western diplomats and wealthy non–Muslims also moved to the suburbs, where state control was relatively minimal.[12] This mobility of settlement led to the gradual occupation of the "empty" areas around the city by socio–economic groups with common interests but different ethnic and religious backgrounds.[13]

In this period, the city expanded with the construction of many religious and social facilities such as mosques, madrasahs, schools, baths and fountains. An indication of this expansion was the fact that two–thirds of the fountains built during this period were located outside the city walls, in areas where the city was growing. As a result, the administrators of the time were caught between the need to meet ever–increasing demand and the realization that improving the water system could attract more migrants to the city. These developments allowed for the creation of new

10 Yunus Uğur, "Büyük İstanbul'un Oluşumu: Osmanlı İstanbulu'nun Sosyal-Mekânsal Gelişimi Üzerine Bir Değerlendirme," in *Türk Tarihinin Kadim Şehirleri*, ed. Okan Yeşilot and Bihter Gürışık Köksal (İstanbul: Selenge Yayınları, 2022), 579–600.

11 Ortaylı, "İstanbul'un Mekansal Yapısının Tarihsel Evrimine Bir Bakış," 77–97.

12 Edhem Eldem, "İstanbul: İmparatorluk Payitahtından Periferileşmiş Bir Başkente," I *Doğu ile Batı Arasında Osmanlı Kenti: Halep, İzmir, İstanbul*, ed. Edhem Eldem, Daniel Goffman, and Bruce Masters (İstanbul: İş Bankası Kültür Yayınları, 2017), 234–235.

13 H. Murat Güvenç and Ayşe Nur Akdal, "Mapping the Bostancıbaşı (Chief Gardener) Registers (1800–1803): An Exploratory Study of Socio–Spatial Differentiation on the Shorelines of Early Modern Istanbul," in Spatial Webs: Mapping Anatolian Pasts for Research and the Public (Istanbul: Research Center for Anatolian Civilizations, 2021).

neighborhoods and the expansion of old ones, both inside and outside the city walls.[14] However, due to the inadequacy of transportation at that time, which prevented the city from expanding beyond its existing boundaries, solutions were developed to create new land within the city (such as the creation of the landfill in Davutpaşa, etc.).[15] Also, some of the Sultan's private gardens (*has bahçe*) outside the city walls were opened to the public and new neighborhoods were built on some of them. These settlements would later develop into districts such as Kandilli and İncirliköy.[16] In fact, some areas on the outskirts of the city, which were forbidden to be turned into settlements, were occupied by ordinary people. For example, a decree issued in the eighteenth–century prohibited the construction of vineyards, gardens and buildings in Okmeydanı, which was a military training area, in order to control urban sprawl and maintain urban hygiene. According the decree, the construction of vineyards, gardens, dairies, buildings and wells in the square was forbidden.[17] In this period, instead of real suburbanization, the emergence of summer resorts and recreational units was observed. One of the reasons for the "false suburbanization"[18] in the spatial structure of the city was the construction of factories, barracks and military schools on the outskirts of the city (such as in Kağıthane, Selimiye, etc.). In other words, conspicuous consumption and public spending marked the beginning of a false suburbanization. The fundamental changes in the spatial structure were caused by the developments of the nineteenth–century.[19]

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14 Shirine Hamadeh, *Şehr–i Sefa: 18. Yüzyılda İstanbul* (İstanbul: İletişim Yayınları, 2017), 15; Cerasi, *Osmanlı Kenti*, 191.

15 Ayhan Han, PhD dissertation, "Langa Yenikapı Dolgu Alanı ve Yalı Mahallesi (1750–1900)" (Istanbul: Istanbul Technical University, 2023); Kiper, "Osmanlı İstanbul'unda Kentsel Mekanın Değişim Süreeci," 432–433.

16 Hamadeh, *Şehr–i Sefa*, 163–203; İnalcık, "İstanbul," İstanbul Ansiklopedisi, 231.

17 Ahmet Refik Altınay, *Hicri 12. Asırda İstanbul Hayatı* (İstanbul: Enderun Kitabevi, 1988), 114.

18 It refers to urbanization where, despite rapid population growth, economic, social and infrastructural development are not progressing in parallel.

19 Ortaylı, "İstanbul'un Mekansal Yapısının Tarihsel Evrimine bir Bakış," 92–94.

From the 1840s, the Ottoman economy and institutional structure began to be increasingly influenced by the "modernization movement" that had emerged and developed in Europe. This process developed in a coordinated manner as follows: First,[20] the opening of the Ottoman economy to capitalist relations within the market mechanism; second,[21] the implementation of reforms by the ruling elites in line with modernity.[22] The gradual process of rapprochement and integration of the Ottoman ruling elites with the West in the nineteenth century changed Istanbul's character, emphasizing its role as a port city on the periphery of the world system and diminishing its characteristics as an administrative center. Especially after the 1840s, this uncontrolled process of integration and adaptation accelerated, resulting in various spatial manifestations.[23] During this period, the administrative center of the city moved from the Topkapi Palace inside the walls to the new palaces built in the area between Beşiktaş and Bebek. The transfer of the administrative center led to the relocation of officials and bureaucrats, which in turn led to the revitalization of these areas (such as Nişantaşı, Teşvikiye, etc.). Similarly, the economic center of the city has shifted from the Eminönü–Beyazıt line to the Galata–Beyoğlu area. A modern central business district with banks, insurance companies, office buildings, warehouses, hotels, etc. began to develop next to the traditional commercial center on the Golden Horn. In this way, the city center was both enlarged and functionally diversified. The city's transportation infrastructure developed, though not comprehensively, with new modes of transportation such as ferries, trams, and trains. The number of boats, for example, increased steadily throughout the century. In addition to maritime transportation, which promoted coastal settlements, there were initiatives for public transportation on land, such as trams. Urban transportation projects have played an important role in shaping both the macro form and the urban fabric of

20 The process that began with the Baltalimanı Treaty of 1838.

21 The process that began with the proclamation of the Tanzimat Edict in 1839.

22 İlhan Tekeli, *Modernizm, Modernite ve Türkiye'nin Kent Planlama Tarihi*, (İstanbul: Tarih Vakfı Yurt Yayınları, 2011), 108.

23 Eldem, "İstanbul: İmparatorluk Payitahtından Periferileşmiş Bir Başkente," 165–260.

the city. The tram lines on the European side spurred the development of the Taksim–Şişli axis, the Tophane–Dolmabahçe coast and the Beşiktaş-Teşvikiye–Nişantaşı axis. However, much of the Old City has retained its earlier structures. For example, neighborhoods adjacent to the Galata-Pera–Harbiye–Şişli axis, such as Tophane and Kasımpaşa, were slow to adapt to the modernization process. Similarly, the changes within the walled city were limited to the fire zones planned according to modern standards. The city expanded along the transportation routes (steamboats and railroads) in vertical bands along the Bosporus and horizontal bands westward to Ayastefanos and Makriköy and eastward to Kızıltoprak, Göztepe, Erenköy and Bostancı, resulting in suburbanization. The city, which underwent a radical transformation due to new transportation technologies (horse–drawn trams, steamboats, etc.) and legal regulations, expanded to Kavaklar in the north, Ayastefanos in the west, Bulgurlu in the east and Pendik in the south.[24]

Istanbul, like the great cities of Europe, had not urbanized in the usual way, taking advantage of the speed brought about by the industrial revolution and the centralizing policies of governments. Instead, it grew rapidly and haphazardly with the arrival of Muslim immigrants from areas lost to the turmoil in the Balkans and southern Russia.[25] The city's population increased more than ever before in its history as a result of immigration from the territories lost to the Empire, surpassing one million inhabitants. At the beginning of the twentieth–century, this number would exceed one and a half million, including those who arrived after the Balkan War of 1912–1913. Thus, from the second half of the nineteenth

24 Osman Nuri Ergin, *Mecelle–i Umur–i Belediyye* (İstanbul: İstanbul Büyükşehir Belediyesi Kültür İşleri Daire Başkanlığı Yayınları, 1995), 3698–3701; Kiper, "Osmanlı İmparatorluğu'nda Kentsel Mekanın Değişim Süreci," 452–453; Zeynep Çelik, Değişen İstanbul: 19. Yüzyılda Osmanlı Başkenti (İstanbul: İş Bankası Kültür Yayınları, 2019), 50; Eldem, "İstanbul: İmparatorluk Payitahtından Periferileşmiş bir Başkente," 245; İlhan Tekeli, "19. Yüzyıl İstanbul Metropol Alanının Dönüşümü," in *Modernleşme Sürecinde Osmanlı Kentleri*, ed. Paul Dumont and François Georgeon (İstanbul: Tarih Vakfı Yurt Yayınları, 1996), 27–29; Tekeli, *Modernizm, Modernite ve Türkiye'nin Kent Planlama Tarihi*, 108–109; Ortaylı, "İstanbul'un Mekansal Yapısının Tarihsel Evrimine Bir Bakış," 94–97.

25 Çelik, *Değişen İstanbul*, 46–47.

century, following territorial losses, the city's population more than tripled with the arrival of Muslim immigrants, and their neighborhoods began to form on the outskirts of the city.[26]

Table 3.1 The population of Istanbul over the years within the boundaries of the municipality

Year	Population
1794	426.000
1829	359.89
1864–1875	490.000–796.000
1877	606.000–722.000 (includes provincial population of 100,000-200,000)
1884	895.000
1896–1897	1.116.946
1901	1.159.000
1914–1916	1.600.000

SOURCE Karpat (2015).

The immigrant population that arrived during this period was not made up of seasonal single men and unemployed workers, but of families that moved permanently, bringing all their belongings with them. In this way, Istanbul became one of the few major metropolises of the time, thanks to its geographical location, which allowed for the concentration of the

26 Kemal Karpat, "İstanbul Nüfusu: XVIII. Yüzyılın Sonundan XX. Yüzyılın Başına," in *Antik Çağdan XXI. Yüzyıla Büyük İstanbul Tarihi*, vol. 3 (Istanbul: İstanbul Büyükşehir Belediyesi Kültür A.Ş. Yayınları, 2015), 494. See. Osman Nuri Ergin, "İstanbul'un Nüfusu," *İstanbul Şehremaneti Mecmuası*, no. 6 (1925): 19–28. According to Osman Nuri Ergin, the city's population was around 450,000-500,000 before the war. With the arrival of refugees and immigrants, this figure almost doubled to 850,000-900,000. The influx following the Balkan Wars of 1912-1913 finally brought the population to over one million.

population, and its hinterland, in addition to its large military and bureaucratic staff.[27]

§ 3.2 New Settlements for Newcomers: Kaza–i Erbaa

The "four towns" (Kaza–i Erbaa), consisting of the settlements of Çatalca, Büyükçekmece, Küçükçekmece, and Silivri, was located in the western hinterland of Istanbul, extending from the city walls to the border of Edirne province.



Figure 3.1 The location of Kaza–i Erbaa (Çatalca, Silivri, Büyükçekmece and Küçükçekmece).

27 Tevfik Güran, *19. Yüzyıl Osmanlı Tarımı Üzerine Araştırmalar* (İstanbul: Eren Yayıncılık, 1998), 1.



Figure 3.2 The location of Kaza–i Erbaa (Çatalca, Silivri, Büyükçekmece and Küçükçekmece). SOURCE: Memalik–i Mahruse–i Şahaneye Mahsus Mükemmel ve Mufassal Atlas, 1907.

Since the eighteenth–century, these towns and their surroundings had developed into a region where immigrants from the Balkans were the first to settle, as it served both as a buffer zone for and an important transit point to Istanbul.[28] This was because the region was located along

28 The region has undergone several administrative changes over the years. The administrative structure of the region, specifically for Çatalca, can be briefly summarized as follows: Until 1839, Çatalca was a "nahiye" of Eyüp, along with areas such as Büyükçekmece, Küçükçekmece and Silivri. In 1840 it became a "kaza" called Kaza–i Erbaa under the province of Edirne. Although some records indicate that it was briefly reattached to Eyüp between 1845 and 1865, it was actually one of the "kaza" within the Kaza-i Erbaa (Çatalca, Büyükçekmece, Küçükçekmece, Silivri), which belonged to the province of Edirne. In 1865, this region, which was attached to the Ministry of Security, underwent changes in its administrative organization and its center and name were successively changed to “Çekmece”, “Çatalca” and “Kaza-i Erbaa”. According to the sources, the boundaries of this administrative organization did not always remain the same.

the land (and later railroad) routes connecting Istanbul to the Balkans, which converged at Küçükçekmece, a settlement essential to the city's security. These routes had made the area preferred the candidate for the westward expansion of Istanbul's settlements and businesses in the late eighteenth and nineteenth centuries.[29] The settlement units in this region began to be integrate with the city from the eighteenth–century. For example, according to the registers, in 1733 there were 167 market gardens outside the city walls (along the Yedikule–Eyüp line), but in 1793, with the inclusion of Çatalca region along this line, the number of gardens increased to 276.[30] The main reason for this integration was the growing population of the city, driven by factors such as immigration (especially in the second half of the nineteenth century), which created a demand for more residential and food–producing land in these regions. The proximity of the area to the city, the increase in population and the city's need for new development areas had increased the value of the land there. In particular, since Küçükçekmece on the railway line and Çatalca on the old Palace Road (Saray Yolu), both on routes leading to the west, were part of these routes, land use had diversified and developed considerably.[31]

This large rural area, home to numerous villages and farms, also served as a hinterland to supply Istanbul's food needs.[32] According to the cadastral records of 1840, about one–third of the agricultural production

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Sometimes a "kaza" or "nahiye" was included within the boundaries of this administrative organization, but in later years it is not possible to see the same arrangement. In 1878, Çatalca (including Silivri, Küçükçekmece and Büyükçekmece) was incorporated into the municipality, but in 1889 it became an independent region. See. Seyfullah Şahin, "Çatalca'nın Sosyo–Ekonomik Durumu: XIX. Yüzyıl Ortaları" (master's thesis, Istanbul University, 2015), 28.

29 The process made a leap with the opening of the first railway line operated by Rumeli Railways between Yedikule (neighborhood around the western walls) and Küçükçekmece in 1871. Construction of the railway began on 4 June 1870.

30 This increase has been examined in detail in Chapter 2 of this dissertation.

31 Savaş Bümen, *Belgelerle Çatalca İlçesi'nin Mülkiyet Yapısının Tarihsel Gelişimi* (Master's thesis, Yıldız Teknik Üniversitesi, 2000), ix, 1.

32 *Bir Kentin Belleği: Osmanlı Dönemi Belgelerinde Küçükçekmece*, ed. by Mehmet M. Polat (Istanbul: Küçükçekme Belediyesi Kültür Yayınları), 262.

in the district was carried out by farms. The owners of these farms tended to live in the nearby cities, especially in Istanbul. In addition, the inhabitants of the surrounding towns had land in the district. In Çatalca district, the land was classified as fields, meadows, vineyards, orchards and market gardens. Most of the land was used for agriculture. The second largest part was designated as meadows for grazing animals. Vineyards, orchards and market gardens were limited within the boundaries of the district.[33] Nevertheless, according to Tevfik Güran, 20 percent of Istanbul's agricultural land consisted of vineyards, orchards, and market gardens.[34] This was due to the fact that, despite the challenges of vegetable production, it was a profitable enterprise when carried out around towns and cities, where the population was naturally denser. The most common occupations in the region were farmers, shepherds, and carters.[35]

> Most of the farms on the European side of Istanbul were Muslim-owned properties leased and cultivated by Christians. The size of these plots was measured by the amount of seed planted. The land was often not contiguous, but divided into smaller plots owned by others. The majority of workers on the farms were seasonal Bulgarians from the Balkans (from April until the planting season).[36]

A large part of the agricultural land was not cultivated. Most of the cultivated plots were of medium size (between 10 and 50 decare). The tax records of the Çatalca district did not contain any record of tithes. The main reason for this was that a significant portion of the land in the district belonged to waqfs.[37] One characteristic of the farms was their size compared to the market gardens. Another was their specialization in growing

33 Şahin, "Çatalca'nın Sosyo–Ekonomik Durumu," 83–118.

34 Güran, *19. Yüzyılda Osmanlı Tarımı Üzerine Araştırmalar*, 79.

35 Şahin. "Çatalca'nın Sosyo–Ekonomik Durumu," 53.

36 Paspatis, *İstanbul'un Ortodoks Esnafı*, 101–102. According to the cluster analysis maps used in Chapter 2, while within the city walls there were relatively fewer gardeners from the Bulgarian region than from the Albanian region, outside the walls the number of gardeners from the Bulgarian region increased.

37 Şahin. "Çatalca'nın Sosyo–Ekonomik Durumu," 83–118.

grains and cereals and raising livestock, rather than growing vegetables for the market. The quantity and price of agricultural products had a significant impact on the availability of food and the cost of living in the city. However, the region's agricultural land was not fully utilized. Until the late nineteenth century, this was the general view of the land around Kaza–i Erbaa.

Istanbul, an administrative center at the crossroads of major routes, had long served as a temporary hub where immigrants gathered before being sent to their final destinations.[38] In this regard, the western hinterland of the city played an important role as a temporary settlement. However, the dramatic turn of events in the Russo–Turkish War of 1877–1878 changed the fate of the region. The Russian army broke through the last line of defense of the city at Küçükçekmece and advanced to Ayastefanos (Yeşilköy). At this point, the war turned into a complete disaster for the Ottoman Empire, as Russian troops stationed in the region started looting villages and farms. The inhabitants of the villages and towns were forced to flee and take refuge in the city, only to return when the war ended. Thus, the immediate aftermath of the war witnessed a somewhat devastated landscape in and around the region, as well as a huge influx of Balkan immigrants fleeing the Russians, some of whom settled on *miri* farms and vacant land in the area. Most of these immigrants arrived after the Land Law of 1858. According to this law, in theory, a neighborhood or village could not be built without official permission, and if it was, the buildings would be demolished.[39]

The arrival of immigrants from the Ottoman Empire's lost territories, particularly the Caucasus and the Balkans, was the primary force that

38 Not all immigrants had to settle in the old or newly established villages. They could also be resettled on vacant land around cities and towns. Those who refused to move to the designated settlement areas were allowed to remain in the provinces and districts where they had originally been settled (including Istanbul), as well as on farms and similar places. In particular, people working in science, industry and crafts, as well as the wealthy, were allowed to settle in cities in order to pursue their professions.

39 Ömer Lütfi Barkan, *Türkiye'de Toprak Meselesi: Toplu Eserler I* (İstanbul: Gözlem Yayınları, 1980), 343.

reshaped Istanbul's periphery and ultimately drove the city's outward expansion.[40] Typically, immigrants had to settle in old or newly established villages, as well as on vacant land in the countryside. The Ottoman government was generally reluctant to allow immigrants to settle in cities until 1877, officially allowing only certain artisans and scholars to remain. However, with the enactment of the Immigrant Settlement

40 The responsibility for migration and immigrant settlement initially laid with the Municipality. Then, due to the rapid escalation of the issue following the Crimean War (1853–1856), the Commission for the Settlement of Immigrants (*İskan-ı Muhacirin Komisyonu*) was established on January 5, 1860, and organized with branches across the Empire. Over the years, these commissions were dissolved and reformed under various names to adapt to changing circumstances. The primary task of the all these commissions was to organize the resettlement and provision of food for the refugees. In this regard, a series of instructions (*talimatname*) and porposals (*layiha*) were issued successively concerning transportation, resettlement, food provision, and the duties expected from the officials. Some of the topics covered in these instructions, which overlap in many ways, included; (1) Refugees were not allowed to leave the areas where they were settled. If they needed to travel, they were required to obtain a travel permit, known as *mürur tezkiresi*. However, documents show that in some cases, the refugees sold their deeds to others and moved to different dwellings. (2) The land provided to the refugees by the government was to be plowed and cultivated by the residents of the villages and towns for a period of one year. Additionally, the villagers and townspeople were expected to assist the refugees with work, such as sharecropping, and housing including their construction. (3) If there was a need to establish a new village, priority was to be given to irrigated areas near forests. (4) The inhabitants of villages and towns were required to accommodate a certain number of refugees. Yet, there were claims that certain village residents obstructed the resettlement of refugees to prevent them from gaining rights to the forests and pastures (*mera*). In cases where they could not be accommodated within villages and towns, the refugees were to be settled on state–owned (*miri*), abondoned (*metruk*), and seized (*mevkuf*) lands that were suitable for settlement. See. BOA. İMMS. 59/2786, 2 Ş 1295 (August 1, 1878); BOA. A. {DVN. MKL. 18/10, 29 Z 1296 (December 14, 1879); BOA. Y.PRK. KOM. 1/26, 30 Ra 1295 (April 3, 1878); BOA. İMMS. 22/961, 2 Za 1277 (May 12, 1861); Ufuk Erdem, *Osmanlı'dan Cumhuriyet'e Muhacir Komisyonları ve Faaliyetleri (1860–1923)* (PhD diss., Erzurum Atatürk University, 2014). Başak Kale, "Transforming an Empire: The Ottoman Empire's Immigration and Settlement Policies in the Nineteenth and Early Twentieth Centuries," Middle Eastern Studies 50, no. 2 (2014): 252–71.; Vladimir Hamed-Troyansky, Empire of Refugees: North Caucasian Muslims and the Late Ottoman State (Stanford, CA: Stanford University Press, 2024).

Ordinance, in 1878, the settlement of immigrants on vacant *miri* lands around cities and towns was permitted. Moreover, the financial situation of the Ottoman Empire did not allow it to provide aid (both in cash and in kind) to such a large number of immigrants. Therefore, the administration's short–term solution seemed to be to provide each immigrant family with a sufficient amount of land, housing, and agricultural tools. A crucial reason for this decision was the inadequacy of the transportation and logistical infrastructure to move large groups of people further into Anatolia and the provinces beyond. Over time, many new immigrant neighborhoods sprang up around Ottoman cities and towns. Most of these sprawling neighborhoods were laid out on a grid plan with standard street widths, creating a sharp contrast to the traditional urban fabric.[41]This situation was intended to contribute to the city's security and supply needs.[42] Moreover, a significant number of immigrants were to be settled on *miri* farms and on vacant land in Istanbul and its hinterland, whether allocated to them or not.

The implementation of such land allocation and distribution processes was organized by the land registry officials without any title fees. In addition, transactions such as land division, sale and inheritance were carried out in accordance with the provisions of the Land Code of 1858.[43] In case of any problems related to these matters, the refugees could turn to the Ministry of Imperial Registry (Defter–i Hakani), which was responsible for such matters. The allocation of land to Bosnian refugees on vacant Miri land around the Rami farms, a large agricultural area in Kaza–i Erbaa, is a clear example of "smooth" land allocation.[44] The Municipality

41 Sevgi Aktüre, "Osmanlı Devleti'nde Taş Kentlerindeki Değişimler," in *Tanzimat'tan Cumhuriyete Türkiye Ansiklopedisi*, (İstanbul: İletişim Yayınları, 1985), vol. 4, 891–904; Tekeli, "Tanzimat'tan Cumhuriyete Kentsel Dönüşüm," 878–890.

42 BOA. İMMS. 64/3046, 29 Z 1296 (December 14, 1879); Ahmet Cevat Eren, *Türkiye'de Göç ve Göçmen Meseleleri Tanzimat Devri: İlk Kurulan Göçmen Komisyonu, Çıkarılan Tüzükler* (İstanbul: Nurgök Matbaası, 1966), 82. Mehmet Yılmaz, "19. Yüzyılda Osmanlı Devleti'nin Muhacir İskan Politikası," in *Osmanlı Tarihi Ansiklopedisi*, vol. 4 (Ankara: Yeni Türkiye Yayınları, 1999): 597.

43 This is covered in chapter 3.

44 BOA. MB. İ. 87/105, 12 M 1299 (December 4, 1881).

was supposed to help the refugees build about 120 houses, when Sultan Abdülhamid II issued a decree ordering the settlement for them. After only one month, the Municipality reported to the ministry of interior that it had completed 70 of them. The refugees then petitioned the government for an Imam, a Muhtar, and for the village to be named Hamidiye as a token of gratitude to the Sultan. This was finally granted.[45] After a decade, a circular letter from the Ministry of Interior approved that such land, which had been given to refugees for the construction of houses and other buildings to form villages and neighborhoods, should be developed into private property.[46]

The government also dealt with the distribution of shares in allocated properties. An essential condition for settling immigrant groups on farms around the city was to prevent the concentration of land in the hands of a few powerful individuals. Instead, according to the guidelines, the land was divided into smaller plots and allocated to the most disadvantaged immigrant farmers. The amount of land allocated to refugees varied according to factors such as location, fertility, size and number of households, and whether it was suitable for medium or large–scale farming.[47] The distribution of Alibey Farm, owned by the Ministry of Awqaf (Evkaf Nezareti) in Istanbul, is a telling example of how the government decided to allocate land to each family according to the number of men in the household. Specifically, 70 decare were allocated for a household with one man and 130 decare for a household with five men.[48] In fact, none of

45 BOA. İ. DH. 871/69615, 23 S 1300 (January 3, 1883).

46 With a ministerial decree in 1893, it was accepted that *miri* land allocated to immigrants for the establishment of a village or settlement would become private property. See. Halil Cin, *Miri Arazi ve Bu Arazinin Özel Mülkiyete Dönüşümü* (Mersin: Çağ Üniversitesi Hukuk Fakültesi Yayınları, 2005), 118–119.

47 According to the Ottoman agricultural statistics of the early twentieth–century, agricultural land of less than 10 decare was classified as small, those between 10 and 50 decare as medium and those over 50 decare as large. Based on this calculation, the average land size in and around the capital Istanbul was 36.5 decare, of which 12.4% was small, 55.2% medium and 32.4% large. See. Tevfik Güran, "Osmanlı Tarım Ekonomisi 1840-1910," *Türk İktisat Tarihi Yıllığı* 91, no. 1 (1987): 225–303.

48 BOA. Y. PRK. ŞH. 1/45, 9 S 1298 (January 11, 1881).

the regulations issued for immigrants prior to 1878 specified the amount of land to be allotted per household; they simply emphasized that the land should be fertile. During this period, the distribution of land was left to the discretion of local administrators, depending on the condition of the available land and geographical circumstances. The 1878 regulation stipulated that a sufficient amount of vacant land (whether government, abandoned, or waqf) in villages and towns should be allotted to immigrants. However, this regulation did not set a specific amount. In contrast, the 1905 and 1906 regulations stipulated that immigrants would be allotted between 20–50 decare and 50–100 decare of land, respectively. After the massive wave of immigration following the Balkan War of 1912–1913, the amount of land to be distributed was again left unspecified.[49] However, settling immigrants and granting them land did not mean the same thing.

In some cases, immigrants who had lived on certain farms for many years were not granted land because of confusion and contradictions in property status. For example, the Izladi (Bulgaria) immigrants who arrived in 1882 and 1884 and settled as 22 households on Alibey Farm had been promised adequate land and other provisions upon arrival. However, in their petition to the Grand Vizierate dated 4 February 1909, they stated that they had not yet received a single decare. They were also concerned about the possibility of being treated the same as newer immigrants who had signed agreements not to claim land.[50] The immigrants from Izladi supported themselves by renting part of Adile Sultan's land from the Sultan's Private Treasury in the village and by farming. In recent years, however, the Sultan's Private Treasury had raised the rent so much that the income from farming could no longer cover the rent. As a result, they were forced to give up farming. This case was a clear example of the increasing value of land in the area. According to the immigrant group, who described their state of poverty and hardship, a decline in agricultural activity in the region would also result in losses to the state in the

49 Yılmaz, "19. Yüzyılda Osmanlı Devleti'nin Muhacir İskan Politikası," 598.

50 BOA. DH. MKT. 2751/19, 13 M 1327 (February 4, 1909).

form of tithes and other taxes. The land allotted to some immigrant groups was neither granted as private property nor large enough for profitable farming. As a result, some immigrants worked as sharecroppers on other farms. In addition, some of the farms on which immigrants settled were later transformed into neighborhoods and villages.

The government took great care to settle the immigrants on vacant miri lands in order to prevent any disturbance between them and the landowners. On 6 July 1889, a petition submitted to the Sultan by Salih Çavuş, one of the immigrants from Silistra who settled with 35 households on the "vacant" land called Ahmet Fakih in the Silivri district, highlighted the potential danger in this regard.[51] According to the petition, the owners of the Bekçiler and Çavuşlu farms, claiming that the land belonged to their estates, launched an armed attack on the immigrant settlement on Ahmet Fakih's land. Salih Çavuş's relative Mustafa was killed in the attack. As a result, Mustafa's request for justice reached the Ministry of Interior and the Çatalca Governorate was informed about the situation. Upon investigation, the officials sent by the governorate found out that the land in question, named Ahmet Fakih, was not "vacant" but actually within the boundaries of the Bekçiler and Çavuşlu estates.[52] As a result, the settlement of immigrants in such a disputed area was a cause of unrest and had a negative impact on public order.[53]

There were a variety of ownership structures and land use patterns around the outskirts of Istanbul. Some of the farms around Istanbul were owned by the state, while others were privately owned or belonged to waqfs. Among the privately owned farms, some were also part of the Sultan's Private Treasury. This diversity often led to conflicts of authority among the various institutions with jurisdiction in the region at critical times. One of the main reasons for these conflicts was that many idle farms on the outskirts of the city had been neglected until the issue of immigrant resettlement arose. For example, a series of correspondences in 1880 focused on how to deal with the farms of Alibey, Alembedros, and

51 BOA. DH, MKT. 1635/55, 8 Za 1306 (July 6, 1889).

52 BOA. DH. MKT. 1657/111, 21 M 1307 (September 17, 1889).

53 BOA. DH. MKT. 1670/63, 4 Ra 1307 (October 29, 1889).

Filibos in the region.[54] The Immigration Commission (Muhacirin Komisyonu) had transferred immigrants from Samakov, Ruse and Dobrudja to the Filibos farm for settlement. However, the Sultan's Private Treasury wanted to lease these farms. In response, the Kaza-i Erbaa Governorate asked for clarification on the suitability of settling immigrants on these farms. As a result, the Immigration Commission, the Municipality, the Ministry of Finance, the Ministry of Interior and the Sublime Porte discussed whether immigrants could be settled on the Filibos farm. Investigations revealed that the farm, which was originally under the Sultan's Private Treasury during the reign of Sultan Abdulaziz, was later transferred to the Ministry of Finance. Based on this finding, the settlement of 80 households from Samakov, 60 from Ruse and 40 from Dobrudja on the 13,254 decare Filibos farm was approved.[55]

The most significant factor in the neglect of these farms was the Ottoman–Russian War of 1877–1878, which caused great concern within the Ottoman Empire. According to Ottoman foreign political and military intelligence reports, Bulgaria posed the greatest post–war threat to the Ottoman Empire after Russia, as its expansionist intentions towards Thrace posed a serious threat to the security of Istanbul.[56] The presence of the Russians and Bulgarians, who stayed in the region for a long time, not only posed a great threat to Istanbul, but also led to the devastation of the surrounding farms. Because of these fears, especially against the Bulgarians, the sale and lease of farms in the region to them should be prohibited. The majority of Bulgarians in the area worked as sharecroppers on local farms, some of whom left the region with the Russians. Most of the remaining Bulgarians were urbanites who owned houses and gardens. The others lived in the villages as sharecroppers.[57]

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54 BOA. Y. PRK. UM. 1/92, 25 R 1297 (April 6, 1880).

55 BOA. ML. EEM. 53/46, 12 Ca 1297 (April 22, 1880); BOA. ML. EEM. 54/75, 29 B 1297 (July 7, 1880).

56 Gültekin Yıldız, Osmanlı Devleti'nde Askeri İstihbarat (1864-1914) (İstanbul: Yeditepe Yayınevi, 2021), 90–96.

57 *Osmanlı Dönemi Belgelerinde Küçükçekmece*, 45.

In a document sent by the Çatalca Governorate to the Ministry of Interior and then to the Grand Vizierate, the Bulgarians living as sharecroppers in the "Bocdar" farm in the Büyükçekmece district were involved in activities that threatened the safety and comfort of the residents of the farm.[58] After the residents of the “Bocdar” farm complained about the Bulgarian sharecroppers, the local government conducted an investigation. According to the findings, there were a total of 12 households with 52 persons, consisting of both male and female Bulgarians, who came to the “Bocdar” farm one after another to work as sharecroppers. There was also a household of three people on the farm called “Kapadık”. Both the Bocdar and Kapadık farms were close to the defense line. It was against the Sultan’s edict for Bulgarians to own property near the defense line. In reality, the Bulgarians only paid income tax and did not own any property. The government was alarmed by the possibility that if the Bulgarians who came as sharecroppers were ignored and settled one by one, their population could increase to the point of forming a village within 5–10 years. This situation posed several problems because of the strategic importance of the region. At the end of the document, it was mentioned that the Çatalca Governorate had sent a book showing the number of households, population and location of the Bulgarians. In response to the Bulgarian threat, the government's policy was to increase the Muslim population in this buffer zone through the settlement of immigrants in the area.

However, despite the state's desire to carry out this settlement process under its own supervision, it has struggled to effectively control the settlement of immigration. This could lead to the occupation of farms and similar properties. It was a common phenomenon for immigrants to occupy urban space, creating a de facto situation that soon became permanent. The government therefore intervened to prevent immigrants from settling illegally and making such situations permanent. For example, a report sent by the Sultan's Private Treasury to the Municipality on 29 May 1900 dealt with the unauthorized settlement of immigrants in a farm

58 BOA. DH. MKT. 1703/87 7 B 1307 (February 27, 1890).

belonging to the Imperial Estates (Emlak-ı Hümayun) in the village of Alibey.[59] According to the document, the gardener's house belonging to the farm was occupied by Cretan immigrants who left the workers and animals outside. The administration ordered the immediate eviction of the gardeners, stating that any delay could turn this de facto situation into a permanent one, causing a loss to the public purse. The most interesting aspect of this example is the occupation of barracks on a farm that was already in active use. The issue of occupied farms will be examined in more detail in the next chapter, using the specific example of the "Balmumcu Farm".

§ 3.3 Efforts to Modernize the Periphery for Food Production

Istanbul's overpopulation caused three main problems. First, it made it increasingly difficult to obtain water and food, leading to a high cost of living. Second, it weakened security and increased the risk of fire. Third, tax revenues declined as the number of unemployed in the city increased. Finally, those who came to Istanbul often worked in illegal sectors such as peddling and did not pay taxes.[60] Meanwhile, population growth in Ottoman Istanbul had encouraged the development of agriculture in both the city and the countryside.[61] The Ottoman administration was forced to deal with the triple problem. One of the most notable responses was to reform and modernize existing agricultural facilities in order to increase both productivity and profitability. Ultimately, the steps taken toward this goal contributed to the changing landscape of expanding Istanbul.

In nineteenth–century, the increase of the production capacity of the Imperial Estates' farms by applying modern methods had been on the agenda as a response to the growing demand for food. Efforts were made to rehabilitate the Imperial Estates' farms such as Ayamama, Alembedros, Safra, Alibey, Filibos, Ayazağa and Maslak on the Rumelian side and

59 BOA. DH. MKT. 2352/28, 29 M 1318 (May 29, 1900)

60 İnalcık, "İstanbul," 234.

61 Donald Quataert, "Osmanlı İmparatorluğu'nda Tarımsal Gelişme," in *Tanzimat'tan Cumhuriyet'e Türkiye Ansiklopedesi*, vol. 6 (İstanbul: İletişim Yayınları, 1985), 1556–1562.

Kurbağalıdere, Alemdağ, Hekimbaşı, Çavuşbaşı, Tokad and İzmit on the Anatolian side due to their low income.[62] Accordingly, the Ottoman government, with the help of local and foreign experts, set up commissions to investigate and report on all aspects of these estates. These reports identified and mapped the locations of the imperial estates on the outskirts of Istanbul. They also identified the forests, mines, water resources, etc. within the boundaries of these estates, and analyzed the fertility of their soils and their suitability for agriculture and animal husbandry. The level of detail in each report was not the same; while some described the estates in general terms, others, especially those prepared in the later period, dealt with the subject in a more systematic manner and included more details.

On 5 August 1863, before the Ottoman–Russian war of 1877–78, Mehmed Cemil and Aram Bey made a report on the Ayazağa and Maslak farms.[63] The boundaries of the farms were described in detail with reference to other surrounding farms and pastures. According to the research, the Ayazağa farm, which is estimated to have an area of 100,000 decare, includes oak forests, limestone quarries and pastures suitable for coal and wood supply. It was mentioned that the soil of Maslak Farm, which was smaller than Ayazağa Farm (30,000 decare), was both muddy and calcareous and could only be cultivated with scientific agricultural methods. For this, it was necessary to bring modern agricultural equipment and artificial fertilizers from Europe. According to Mehmet Cemil and Aram, these completely empty and neglected lands could be used more efficiently if the right agricultural methods were applied. Depending on the conditions of the farms, alternating between cereals (oats, barley, wheat) and root crops (potatoes and beets) would increase yields. In addition, it was necessary to plant clover and create artificial pastures, and to feed local cows that were to be mated with bulls brought from Europe. In this way, it was possible to have fatter and more milk–producing animals in less time. With this policy, even more taxes could be collected

62 BOA. Y. MTV. 6/62, 21 B 1298 (June 19, 1881); BOA. Y. MTV. 9/2, 13 C 1299 (May 2, 1882).

63 BOA. Y. PRK. HH. 5/28, 4. Ş. 1296 (July 24, 1879).

from these animals. According to Mehmet Cemil and Aram, these two farms, which had remained empty and neglected despite their proximity to the capital, could not only generate a considerable income but could also be turned into pilot farms (numune çiftliği). If these two farms were donated by the Sultan as such, they could be used to teach modern agricultural techniques (fenni ziraat) to the children of the peasants, thus contributing to the public wealth in every sense.

Sixteen years after this report was written, in 1879, M. Frémy, upon request, gave his opinions and suggestions in writing regarding the opening of an agricultural school on the Maslak farm.[64] M. Frémy described these schools as institutions that trained young people who would see agriculture as a source of livelihood for the rest of their lives. According to him, the agricultural school should have been a separate entity from the pilot farm, since the latter were places where new agricultural methods and technologies were experimented with, and the results of these experiments were presented to students and the public. Pilot farms were to train landowners and agricultural teachers interested in agriculture, while agricultural schools were to train pioneer farmers. He then defined the characteristics of the students to be admitted to the agricultural school, the practical work expected of them, and the curriculum to be taught at the school. It would be more appropriate to hire foreign experts for a period of time to make the school function administratively and agriculturally. In France, such agricultural schools were financed by some large landowners, while in the Ottoman state, the large landowners were not interested in such endeavors for political reasons. Thus, the creation of such progressive institutions and organizations was limited to the efforts of the Sultan and his bureaucrats. M. Frémy concluded his report by discussing the characteristics of the Maslak farm and its suitability as an agricultural school. He suggested that if properly restored, this unprofitable land could even make a profit.

Another report dated 1 January 1910, prepared by high–ranking bureaucrats, provided detailed information and suggested measures to

64 BOA. Y. PRK. OMZ. 1/3, 11 B 1296 (July 1, 1879).

increase and improve the income of the Ayamama, Alembedros, Pilibos and Alibey farms, which were among the Imperial Properties in and around Istanbul.[65]

In this report, Ayamama and Alembedros were considered together because of their contiguous boundaries, totaling 4,642 decare. While the Alembedros farm had only one sheep barn, the Ayamama farm had "perfectly constructed" large farm buildings and barns, poultry houses, and warehouses. These farms, with wide meadows and fertile fields, were connected to the Ayastefanos railroad station by a one–and–a–half mile causeway. Instead of destroying these farms, which were in such good condition in the hands of the tenants, experts were in favor of developing them and making them more profitable with very little effort. In this way, much more profit could be made than by renting them out, and possible destruction could be avoided. In this section, detailed calculations were made on the balance sheet of the expected amount of profit, taking into account seasonal conditions and the labor required for animal (e.g. meat, milk, fertilizer) and agricultural production. As a result a list of fifteen points. To summarize, first, it was recommended to use new methods and technologies for agricultural production, such as artificial fertilizers and agricultural machinery. Second, it was suggested that the management of Uzunköprü and Ayamama meadows should be taken over by the imperial stables and returned to the Ayamama farm. Third, he suggested planting saplings in different places and using stones from quarries for construction. Fourth, he recommended diversifying production by raising poultry for eggs and meat, planting mulberry trees to feed silkworms, and setting up beehives to produce honey. The main objective of the proposed actions was to transform the farms into productive and profitable enterprises.[66]

Although the Ottoman administration made several attempts to meet the city's growing food needs by reviving idle farms with modern methods to contribute to the city's economy, this intention could not keep up

65 BOA. HH. İ. 201/60, 7 M 1328 (January 19, 1910).

66 *Osmanlı Dönemi Belgelerinde Küçükçekmece*.

with rapid urbanization and the influx of immigrants. The increased activity in the construction and industrial sectors in the region has also led to an increase in the price of land.

§ 3.4 Emerging Ottoman Industry Chooses Its Settlement

In the nineteenth–century, industry, slums, immigrant neighborhoods, and second homes gradually began to encroach on the agricultural landscape on the periphery of some cities such as Hereke, Izmit, Bursa, and Istanbul (including its immediate environs) along the coast of the Sea of Marmara.[67] In fact, at the beginning of the twentieth century, about 55% of the industrial facilities of the Ottoman Empire were located in Istanbul.[68] The main reason for this was Istanbul's favorable transportation infrastructure, with access to sea, land and rail routes that put it conveniently close to the market.[69] In addition, industrial facilities tended to cluster geographically for reasons of security, infrastructure, and to facilitate interactions such as the exchange of knowledge and expertise.[70] Factories became new elements of the urban periphery.

Although modern military–industrial facilities began to be established in the Ottoman Empire during the reigns of Selim III and Mahmud II, they remained isolated examples.[71] In the Ottoman Empire, the initiative to develop industry with a comprehensive approach began with the Tanzimat reforms after the 1840s. The main reason for this was the realization that it was no longer possible to maintain traditional industrial methods in the new global conditions, and the need to create a modern

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67 Engin Kırlı "19. Asır Ortalarında Zeytinburnu–Bakırköy Bölgesinin Osmanlı Sanayiindeki Yeri ve Önemi," in *V. Uluslararası Osmanlı İstanbul'u Sempozyumu Bildirileri*, ed. Feridun M. Emecen, Ali Akyıldız, Emrah Safa Gürkan (İstanbul: İstanbul 29 Mayıs Üniversitesi: İstanbul Büyükşehir Belediyesi, 2018), 743–746.

68 T. Gül Köksal ve Zeynep Ahunbay, "İstanbul'daki Endüstri Mirası İçin Koruma ve Yeniden Kullanım Önerileri," *İTÜ Dergisi*, no. 2 (2006): 126.

69 Ibid., 132.

70 Kırlı, "19. Asır Ortalarında Zeytinburnu–Bakırköy Bölgesinin Osmanlı Sanayiindeki Yeri ve Önemi," 750–751.

71 Ibid., 739–740.

industry had become apparent. Encouraging the consolidation of industrial workers into enterprises was recommended in most reports on industrial development. In this period, many factories were established by both the state and private investors, most of them foreign.[72] Despite their limited number, these factories were strategically located in easily accessible locations around the city[73]

Industrial activities in Istanbul were concentrated in three main areas: the Golden Horn and its surroundings, the Beykoz region, and the Zeytinburnu–Bakırköy axis.[74] The latter served as the geographical core of this endeavor, located west of Istanbul. It covered an elongated area bounded by the Edirne Road in the north and the Sea of Marmara in the south. Stretching about nine miles from the Yedikule corner in the east to Küçükçekmece in the west, this area formed a distinct segment of the city's immediate environs. This area, which includes both manufacturing and agricultural complexes, was designed as an industrial park. In this context, a foundry and an engineering complex with workers' accommodation and a technical school were opened in Zeytinburnu. A spinning and weaving factory was also opened in Bakırköy. There were also ironworks and a shipyard equipped for the construction of small steamboats. A model farm project was also established further west towards Yeşilköy.[75] This model farm, built on the Ayamama farm and based on French models, operated between 1848 and 1852. Its purpose was to grow American cotton, the raw material for the textile factory in Yedikule, and

72 In addition to post-war migration, a significant phenomenon that contributed to Istanbul's population growth was the influx of foreigners. These entrepreneurs appeared as a result of Istanbul's integration into the global economic system. Together with their staff, experts and employees, their number reached one hundred thousand. See. S. Shaw and E.K. Shaw, *History of the Ottoman Empire and Modern Turkey*, vol. 2 (Cambridge, 1977), 241. Ömer Celal Sarc, "Tanzimat ve Sanayimiz," in *Tanzimat I* (İstanbul: Maarif Matbaası, 1940), 434–437. Edward C. Clark, "The Ottoman Industrial Revolution," *International Journal of Middle Eastern Studies* 5, no. 1 (1974): 67; Çelik, *Değişen İstanbul*, 42–43.

73 Tekeli, "Tanzimattan Cumhuriyet'e Kentsel Dönüşüm," 878–890.

74 Kırlı, "19. Asır Ortalarında Zeytinburnu–Bakırköy Bölgesinin Osmanlı Sanayiindeki Yeri ve Önemi," 744.

75 Clark, "The Ottoman Industrial Revolution," 67.

to practice modern animal husbandry and agricultural methods. The operation of this model farm in Ayastefanos came to a halt with the outbreak of the Crimean War. As a second initiative for modern agriculture in the region, it was decided to establish an agricultural school and a model farm at Halkalı Farm, north of the Zeytinburnu–Bakırköy axis, between 1882 and 1885. However, due to the lengthy construction process of this government investment, it could not be put into operation until 1892.[76]

These industrial sites were chosen for their good transportation links, proximity to markets and water sources, labor capacity (due to immigration), and distance from densely populated areas.[77] Bureaucrats sought to locate industry at a moderate distance from the city, neither too close nor too far, to protect residents from the adverse effects of industrial activity.[78] In this context, it can be observed that the factories remained close to the agricultural lands and market gardens on the outskirts of the city and even influenced their transformation. In particular, the market garden area in western Istanbul along the Zeytinburnu–Bakırköy axis, where vegetables and fruits were widely grown, began to change under the impact of industrialization. The water needs of the factories as well as the needs of the vegetable and fruit gardens played a significant role in the demand and transformation of this water–rich area.[79]

An example related to this issue is the expropriation process of the surrounding market gardens in order to expand the area of the Imperial Gunpowder Factory (Baruthane–i Amire) in Makriköy, a state institution. In 1904, it was initially planned to exchange the gardens and fields of the Imperial Gunpowder Factory, which were owned by different individuals, for the garden of the Imperial Cannon Foundry, which was adjacent to the factory's boundaries. However, it was later realized that such an exchange would be detrimental to the interests of the Imperial Cannon Foundry.

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76 Volkan Çeşme, *Halkalı Ziraat Mektebi* (Master's thesis, İstanbul, 2011), 17.

77 Ibid., 744–745.

78 A. Gündüz Ökçün, "19. Yüzyılın İkinci Yarısında İmalat Sanayii Alanında Verilen Ruhsat ve İmtiyazların Ana Çizgileri," *AÜSBFD* 27, no. 1 (Ankara, 1972): 159–162.

79 Rasin Önsan, *Kaybolan Bakırköy* (İstanbul: Afa Matbacılık, 1989), 14–19.

Therefore, it was decided that the gardens and fields in question would be expropriated by the Private Treasury with the specified compensation amounts. Finally, the Çukurlu Garden in Makriköy, which was within the boundaries of the Imperial Gunpowder Factory, was purchased under the expropriation law for just over 243,000 piasters, as the water in the garden was essential for the factory complex. It was then ordered that a map of the area be sent immediately to the Yıldız Palace. Thus, the payment of this amount and the allocation of the water from the big well in the market garden for the use of the factory were decided by imperial decree.[80]

§ 3.5 Attempts to Draw A Line Between Urban and Rural

Historically, Istanbul was bounded to the west by the district of Küçükçekmece, which was considered the starting point of the "countryside".[81] The spatial and legal situation of the vineyards and market gardens in Küçükçekmece, located on the western border of the city, was a clear example of the municipality's concerns about urban expansion. In a series of documents, the Municipality, the Council of State, the Ministry of Interior and local actors discussed whether the vineyards and market gardens in Küçükçekmece should be considered waqf land within the city limits or miri land outside the city limits. The Municipality presented two arguments for keeping the market gardens and vineyards in Küçükçekmece outside the city limits. First, Kaza-i Erbaa (Çatalca, Silivri, Büyükçekmece and Küçükçekmece), located between Edirne and İstanbul, was the western rear region of the city in terms of food and settlement. After the Ottoman–Russian War of 1877–1878, a significant part of the Muslim subjects who immigrated from Rumelia settled there. The uncontrolled growth of the city in this direction was a source of concern for the Municipality, which was already struggling to provide municipal

80 BOA. HH. İ. 170/39, 1 Ra 1322 (May 16, 1904); İ.HUS. 120/40 28 Ca 1322 (August 10, 1904); İ.HUS. 120/63 23 C 1322 (September 4, 1904).

81 To prevent migration to Istanbul, the administration prohibited migrants from moving beyond Küçükçekmece. See. Semavi Eyice, "Tarihte Küçükçekmece," Güneydoğu Avrupa Araştırmaları Dergisi, no. 6–7 (1978): 73.

services with an inadequate budget. Second, it was believed that maintaining Küçükçekmece beyond the city limits would increase the revenues of the Imperial Treasury. The vineyards and market gardens that belonged to the *mülk* and *waqf* were taxed at eight per thousand, while those that were to be taxed as *miri* land were taxed at four per thousand plus tithe.

In this regard, a report sent by the Sub–District Council (Şehremaneti Mülhakat Meclisi) to the Municipality on 2 April 1887 emphasized the importance of defining the boundaries of certain neighborhoods between Küçükçekmece and Dersaadet (the walled city) for the sake of public order and the interests of the Imperial Treasury.[82] According to the Sub–District Council, including these agricultural units in Küçükçekmece and subjecting them to a land tax of four per thousand and a tithe would protect the treasury from potential losses. Thus, on an old map, land outside the city walls, such as farms, fields, vineyards, and market gardens, were not included in the municipal boundaries.

In this context, the municipality asked the Ministry of Interior whether it had the authority to implement the issues outlined in the Sub-District Council's report.[83] As a result of bureaucratic correspondence, the Council of State issued a report on 14 May 1887, emphasizing that farms, fields, vineyards, and market gardens growing essential crops for Dersaadet should remain exempt from increased taxation.[84] Imposing a tithe on these crops could make it difficult for the people to meet their needs. Therefore, an increase in the tax was not considered to be in the best interest. The Council of State subsequently informed the Municipality that these lands would continue to be taxed at the rate of eight per thousand, as in previous years.

These developments caused anxiety among the government departments as well as local actors such as headmen, councils of elders (*ihtiyar heyeti*) and steward of gardeners. For example, on 19 June 1887, the headman and members of the council of elders of Makriköy submitted a

82 BOA. ŞD. 725/11, 8 Ş 1304 (May 2, 1887).

83 Ibid.

84 BOA. DH. MKT. 1420/5, 21 Ş 1304 (May 15, 1887).

statement to the Council of State regarding the market gardens and vineyards located in and around the Eyüp district of Istanbul, along with their owners.[85] According to this statement, the gardeners in this area had never paid taxes on the tithe from the market gardens and vineyards. Instead, they paid an annual tax to the Imperial Arsenal until the new cadastral survey was implemented. After the abolition of the tax, they began to pay a land tax set at eight per thousand of the estimated value of each market garden. In addition, they had to pay a stamp tax (*pul resmi*) per cart when passing through the city gates, as well as a garbage tax per cart in Eminönü to transport the produce from their gardens to the walled city every day. The village headman and the council of elders state that the gardeners sold their produce to the Istanbul's vegetable vendors (*sebzevatçı ahali*) and the Imperial Vegetable Commission (*beylik sebzevat komisyonu*) and that they produced especially for the Dersaadet market.

In another petition dated 4 July 1887, some gardeners stated that they had been paid a fixed tax (*maktu vergi*) of eight per thousand for their market gardens outside the city walls. However, in the last one or two years, the Makriköy Governorate has tried to impose a tithe on the vegetables grown in these gardens instead of this tax.[86] The gardeners believed that the revenues from their gardens was not subject to the tithe tax for several reasons. First, the land of the gardens was not miri but waqf. These waqf lands had previously been granted in response to many advance payments, and a certain amount continued to be given each year. Therefore, the gardens were not subject to the provisions of the tithe laws. Second, during the cadastral survey, each decare of market gardens was valued at 2,500–3,000 piasters, as opposed to the fields, which were valued at 100–170 piasters, and the annual tax of eight piasters per thousand to the treasury was calculated on the basis of this valuation. In addition, garden produce was harvested at night, without storage or pickling, and brought to Dersaadet each morning to meet the needs of the

85 BOA. ŞD. 2923/28, 17 Za 1304 (August 7, 1887).

86 Ibid.

population and soldiers. What is more, a stamp tax was levied on every cart entering the city walls and a garbage tax was collected at the Eminönü Bridge. In the end, after covering expenses, there wouldn't be enough left to pay for daily labor. Imposing a tithe on these vineyards and market gardens would have placed a burden on both the gardeners and the city's residents, while also harming the waqfs to which these gardens and vineyards belonged.

As a matter of fact, the decision of the Council of State that no tithe should be collected from the produce of the vineyards, market gardens and farms around the walled city, as they grew vegetables and other products necessary for the public, was communicated to the Makrikoy Governorate. However, the government insisted that these gardens be subject to the tithe tax, referencing the old map of the city. According to the gardeners, it was wrong to say that these vineyards and market gardens were "not part of the city" based on arbitrary maps. In this context, deviating from the ancient law (hukuk–ı kadim) and subjecting these gardens to the tithe would have caused considerable hardship to both the gardeners and the city's residents. Therefore, it was necessary to make sure that the Makriköy Governorate would comply with the decision of the Council of State by issuing a final order. However, the Provincial Accounting Office (Vilayet Muhasebesi) disagreed with the Council of State on this issue. In its report of 10 August 1887, the Office stated that the decision of the Council of State did not clearly specify which part of Küçükçekmece it applied to.[87] The Office claimed that the area outside the city walls was part of the Küçükçekmece district and had been subject to the tithe for a long time. It was argued that replacing the tithe with a tax of eight per thousand was not appropriate. The office noted that the crops grown in the limited area of Küçükçekmece contributed little to Istanbul's food supply, as the region was primarily focused on grain cultivation. In contrast, the vineyards and market gardens of the Büyükçekmece district, which served as the main source of fresh food for Istanbul, continued to be subject to the tithe.

87 BOA. ŞD. 1913/36, 20 Z 1304 (August 10, 1887).

The example of Küçükçekmece offers a valuable perspective on whether vineyards and market gardens should be located inside or outside the city. It highlights the tension between two priorities. First, ensuring that the basic food needs of the city are met in an affordable and healthy way, and increasing the revenues of the imperial treasury by adjusting the tithe. Second, it highlights the mismatch between the pace of urban expansion and the city's capacity to provide services in the last quarter of the nineteenth century. Ultimately, these issues remained pressing and occupied the agenda of Ottoman officials for quite some time. The central question was whether jurisdiction of the municipality should extend only to urban areas where buildings ended, or whether it should also include taxable vineyards, vegetable gardens, and fairgrounds.

§ 3.6 Concluding Remarks

Istanbul had been growing especially since the seventeenth and eighteenth centuries. In the eighteenth century, the city expanded beyond its traditional boundaries, particularly along the Bosporus in a north–south axis, as summer residences were built by the ruling class and elite. The second half of the nineteenth century, with the rapid population increase and introduction of urban transport technologies (such as trams and suburban trains), the city expanded to an unprecedented extent, albeit eclectically, to Kavaklar in the north, Ayastefanos in the west, Bulgurlu in the east and Pendik in the south.

One of the most significant factors in the city's population growth was the arrival of hundreds of thousands of immigrants following the Ottoman–Russian War of 1877–1878. The western periphery, particularly the region between Edirne and Istanbul, became the main area of settlement for those who remained in the city. This zone, with its large labor force, existing transport infrastructure and proximity to the urban core, was seen as an ideal location for the development of modern agricultural and industrial facilities. Characterized by farms and pastures, the area functioned as a transitional zone between the urban and rural landscape,

dotted with market gardens, orchards and vineyards. It served as a reserve of both food and housing. Legal and illegal immigrants from the Balkans and the Caucasus settled in the region's villages, state farms and private estates, driving urban transformation and outward expansion. As discussed, this process of transformation was not limited to the outskirts, but also took place within the city itself. In other words, urban growth was both outward and inward. However, due to the high cost of living, tax burdens and concerns about safety and hygiene in the city center, movement to the periphery became the more dominant trend.

In this period, new villages were created as immigrants settled on state–owned farms and lands in the western hinterland of the city, either through government allocation (distribution of medium–sized plots of land ranging from 50 to 70 decare) or through illegal means. Some became sharecroppers on farms in the region. Immigrant sharecroppers (from Izladi), for example, said in their petitions that the rent increase was causing them difficulties and could have a negative impact on agricultural production in the region. Although it remains unclear whether this situation decreased commercial agricultural production in the region, it is not difficult to assume that the value of land in the area rose significantly. It is possible to speculate two opposite directions: 1) a decline in agricultural activity due to rising urban land values (as seen in the example of Izladi), 2) agricultural activity by immigrants, who were allocated an average of land, contributing to the urban economy by providing food for the city. The second option should take into account the fact that migrants could only engage in subsistence production or lease their land.

As shown in the previous chapter, those working in the market gardens outside the city walls and especially on the farms had already been predominantly Bulgarian. After the Ottoman–Russian War of 1877–1878, the Bulgarian population in the region began to be perceived as a threat. The Ottoman administration was concerned that the Bulgarians might seize the farms where they worked as sharecroppers. The government was quite confused about the movement in the region and was unable to respond effectively. This chapter argues that the government’s stepping

up its efforts to explore the region and its potential after the war had to do with political concerns as much as administrative and economic ones.

Urban growth during this period led to an increase in demand for food and housing. The inability to provide affordable and abundant food had a direct impact on the high cost of living in the city. In response, the Ottoman administration sought to increase agricultural productivity by modernizing and revitalizing former agricultural areas, especially farms. However, the plans did not materialize as the government could not keep up with the increase in land values due to high demand driven by immigration and emerging Ottoman industry.

The periphery of Ottoman Istanbul in the nineteenth–century presented a mixed landscape of agricultural areas alongside industry, summer houses, working–class neighborhoods and immigrant settlements. After the 1840s, with the Tanzimat reforms, factories (albeit limited in number) and workshops were opened in Istanbul by both state and private investors, thus becoming new elements of the urban periphery. The most important industrial area of the period, which was designed by the Ottoman administration as an industrial park, was located to the west of the city, along the Zeytinburnu–Bakırköy axis. It was planned to set up model farms for agricultural production to support industry, but the Crimean War prevented this from happening. Instead, in 1892, after long efforts, an agricultural school and model farm was established in Halkalı, north of this axis. The main reasons why the region was considered suitable for modern agriculture and industry were its transport links and the cheap, abundant labor provided by immigration. Moreover, the region was neither too close to the city center to be inconvenient, nor too far away to benefit from its resources. In addition, this region was suitable for both agriculture and industry was its abundant water resources. Factories, like market gardens, also needed large amounts of water. The coexistence of different elements in the urban periphery revealed many potentials for urban growth.

One of the most challenging aspects of the city's rapid growth was drawing a boundary for the city. The urban boundary, which will be explored in more detail in the next chapter and will serve as an overarching

theme throughout the thesis. In this chapter, the concept of the urban boundary is used to explore the question of whether the market gardens and vineyards of Küçükçekmece, located on the western edge of the city, are urban or rural. At a time when the modernization movement had begun but was not yet complete, drawing boundaries for a rapidly expanding city with rising land values was a highly complex task, influenced by factors such as taxation, rent and municipal services. This process involved many stakeholders, including gardeners who were directly affected by potential changes in tax rates as a result of shifting boundaries. The question of whether or not to include Küçükçekmece within the city limits was a recurring point of contention between the Council of State and the Municipality, and as will be seen in the next chapter, they will often clash again over boundary issues. As this example and the next chapter will show, while the municipality sought to reduce its boundaries in order to reduce the areas for which it was responsible due to its limited budget, the Council of State, perhaps to increase the revenue of the Treasury, overlooked and even encouraged the expansion of the city. It also examines two processes: 1) the role of gardening in the development of the city and its surroundings, 2) the transformation of inner–city market gardens due to rising land values.

4

Efforts to Regulate and Control Space in the late Nineteenth–Century

This chapter presents some snapshots of Istanbul that illustrate the discrepancies between the de facto and de jure situation as part of the city's dispersed development trend and blurred "urban boundary." [1] Alongside this overarching theme, it focuses on the main challenges of the period: the population crisis and its complications (such as the occupation of unused farmland), a dispersed pattern of growth (including land development through gardening), inadequate municipal services, hygiene and health problems (including epidemics), legal confusion and discord between official authorities. These contributed to the unplanned and sometimes haphazard growth of the city, exacerbating problems that were already difficult to solve, including urban agricultural practices. In addition, I examine how the Ottoman administration initiated several

1 In the fields of urban planning and geography, the concept of urban boundaries has been used particularly during periods of rapid and unplanned urbanization, when it became difficult to define where a city began and ended. Typically, it referred to the legal, administrative and physical boundaries of a city. In the Ottoman Empire, during the nineteenth–century, a period in which modern notions of urban management and planning began to be adopted, the question of how to define the boundaries of the city sparked debates among various state institutions. These will be examined in detail throughout the chapter.

efforts to regulate and control space, using newly adapted modern "urban planning"[2] methods and regulations. However, the actual situation rarely corresponded to the desired results. In short, in this chapter I analyze the spatial implications of conflicts between institutional, legal and administrative actors in relation to the city. I argue for the inadequacy of these top–down processes in defining and demarcating urban space.

§ 4.1 Not Allocated But Occupied: Balmumcu Farm

The story of the Balmumcu farm, located in the heart of the developing city, is a vivid example of how an urban area began to change at the turn of the century.[3] Although the process that took place here was not the only method for such a transformation of space, it is an interesting case in which both legal and illegal means were at work. The migration crisis and urban growth discussed in the previous chapter meant that over the years some state land, such as unused farms, etc., were "occupied" by lower and lower–middle class groups.

The Balmumcu farm crossed the borders of several neighborhoods, including Dikilitaş, Fulya, Beşiktaş, Balmumcu, Teşvikiye and Nişantaşı.[4]

2 Modern urban planning developed in Western European cities (such as Paris and London) in the nineteenth–century as a result of rapid population growth in urban areas. This discipline aimed to organize the physical spaces of cities and improve their socio-economic and environmental conditions. Its main motivation was to monitor and control the growth and development of cities.

3

4 Egemen Yılgür, "Son Dönem Osmanlı İstanbul'unda Kent Yoksulluğu: Balmumcu Çiftliği Örneği," *Toplum ve Bilim*, no. 134 (2015): 120.

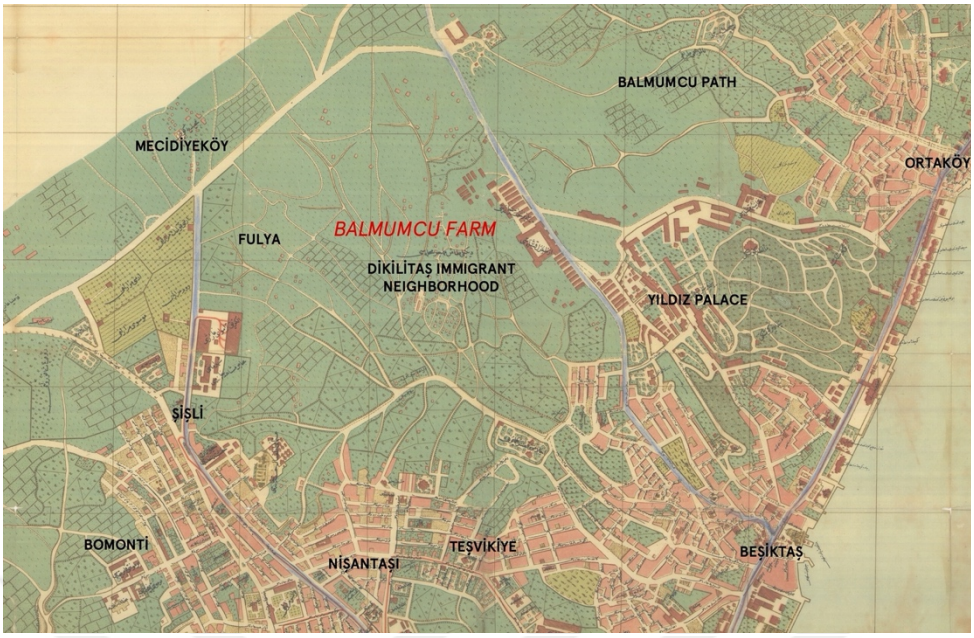


Figure 4.1 The location of Balmumcu farm. SOURCE: The map of Necib Bey, 1918.

This land, which belonged to the Sultan's private treasury, was transferred to Sultan Abdülhamid II's brothers, Reşad and Kemaleddin Efendi, during his reign. The neighborhoods surrounding this land were favored by both high and low state officials due to their proximity to the palaces. For example, the Teşvikiye neighborhood was built on part of the land of the Balmumcu farm for the palace servants and state officials.[5] Especially during the reign of Abdülhamid II (1876–1909), it was observed that high–ranking state officials settled in the neighborhoods surrounding Beşiktaş, such as Serencebey Yokuşu, Abbasağa, and Yıldız.[6] Poverty in Istanbul became evident after the Ottoman–Russian War of 1877–1878. Idle farmlands in regions such as Balmumcu and Zincirlikuyu were occupied by immigrants. These vast and sparsely populated "empty" lands became home to lower–class immigrants.[7] Because of the strategic importance of

5 M. R. Esatlı, *Saray ve Konakların Dilinden Bir Devrin Tarihi* (İstanbul: Bengi Yayınları, 2010), 43.

6 N. Akbayar, *Beşiktaş Past and Present* (İstanbul: Türkiye Ekonomik ve Toplumsal Tarih Vakfı, 1998), 23.

7 Yılgür, "Balmumcu Çiftliği Örneği," 129–130.

the region and its proximity to the palace, the immigrants who "occupied" the farmland were questioned by the authorities.[8] As a result, on 29 September 1888, a report was prepared by the Immigration Commission to find out who had settled in the buildings built on the Balmumcu and Zincirlikuyu farms owned by Reşad and Kemaleddin Efendi.[9]

According to this report, the immigrants had built squatter houses on these lands in violation of the decision. It had been decided that when the immigrants arrived in Istanbul, they would be transferred to other provinces of the Ottoman Empire before they had time to settle on any land. This decision was communicated to the Municipality and the Ministry of Police on the same day. The report prepared by the Immigration Commission divided the immigrants arriving from Eastern Rumelia (Rumeli-i Şarki) and the Caucasus into three groups. The first group consisted of Circassian immigrants who, according to the Sultan's decree, were to be disembarked at the ports in and around Trabzon and then sent to Sivas and Mamuretülaziz and their surroundings for resettlement. The second group consisted of those who came directly to Istanbul from Eastern Rumelia and Bulgaria. They were to be transferred to Bursa, İzmit, Eskişehir, İzmir, Selanik and other provinces to settle with their relatives. The third group consisted of unskilled peasants, some of whom wanted to stay in Istanbul. Among these, those who eventually settled in the areas of Balmumcu and Zincirlikuyu came to be regarded as the old inhabitants (ahali–i kadime).[10] According to the head of the Immigration Commission, whose signature appears at the end of the report, this third group of immigrants was not the responsibility of the Immigration Commission, but of the Municipality and the Ministry of Police.

Following these developments, a report on the number of inhabitants was submitted to the Sultan on 30 September 1888. According to this

8 Ibid., 120.

9 BOA. Y. PRK. KOM. 7/7, 23 M 1306 (September 29, 1888).

10 According to the report prepared by the Office of the Special Council (*Bab-ı Meclis-i Mahsus*), migrants arriving in Istanbul could be accepted as part of the established population if they had relatives or close connections already residing in the city and were placed under surety. See. BOA. İ. MMS. 102/4311, 7 Ra 1306 (November 11, 1888).

report, there were 39 households in Reşad Efendi's land and 82 households in Kemaleddin Efendi's land.[11] The report included the names of the household heads, the household members, and the household population. In addition, information was recorded on when the heads of household came to the farm, the size of their land, from whom they rented or bought their land, and their occupations.[12] The Sultan demanded the removal of the immigrants from the farms of Balmumcu and Zincirlikuyu. Therefore, it was necessary to determine when and by whom these immigrants were settled there and whether they were the owners or tenants. Another report prepared jointly by the Beyoğlu Governorate and Beşiktaş police officers stated that the immigrants who settled in the farms in question at different times consisted of a total of 401 inhabitants, 96 from Anatolia and 305 from Rumelia. Of these, 267 were leaseholders and 134 were owners.[13] Within this population, the predominant occupations were low–level officials working in state institutions, porters (mostly from Lofcha), and small farmers (mostly Albanians). Strawberry production was widespread in Nişantaşı and its surroundings. Since the Balmumcu farm belonged to the Sultan's Private Treasury, the strawberries produced here were sent directly to the palace.[14] This fact should have given legitimacy to the households cultivating the land.

A significant part of the population settled in Balmumcu Farm had arrived after the Ottoman–Russian War of 1877–1878 and had been living there for about ten years.[15] Many of them constructed buildings on the farmland and planted vineyards and market gardens. In addition, heads of households earned additional income by buying, selling, or renting

11 Kemaleddin Efendi's register was examined by Egemen Yılgür. See. Egemen Yılgür, "Balmumcu Çiftliği Örneği."

12 Yılgür, "Balmumcu Çiftliği Örneği," 121.

13 Yılgür examined 83 houses on the land of Kemaleddin Efendi in Balmumcu Farm. See. Yılgür, "Balmumcu Çiftliği Örneği." The 39 houses located on the land belonging to Reşat Efendi in Balmumcu Farm are addressed for the first time under this heading. See. BOA. Y. MTV. 35/70, 2 S 1306 (October 8, 1888).

14 Esatlı, *Saray ve Konakların Dilinden Bir Devrin Tarihi*, 29–30.

15 Yılgür, "Balmumcu Çiftliği Örneği," 132.

farmland.[16] The transfer of land created a kind of legitimacy for those deceived by forged deeds and made it difficult for the state to hold them accountable. Under normal circumstances, those who settled on lands belonging to the Sultan, such as the Balmumcu farm, were issued deeds by the Treasury for the right to dispose of them.[17] However, there were abuses by lower officials and land guards (korucu). A document presented to the Sultan showed that the fields where the immigrants had built huts and cultivated were leased to them with promissory notes by the men who served Reşad and Kemaleddin Bey.[18] In addition, most heads of households made an annual payment to the so–called land guards.[19] For this reason, the Ministry of Police advised that if the immigrants were removed, the value of the land, houses, and crops at their disposal would have to be paid, and the rent paid by the tenants would have to be returned. After consultation with the relevant departments, the joint decision conveyed to the Sultan was that those who had settled so far should remain, but that any further settlement efforts should be prevented. About twenty years after the investigations on the settlement of immigrants in farm land of Balmumcu and Zincirlikuyu, a series of correspondences took place between different government departments. The letters show that unauthorized construction continued in these farms. In chronological order, on 3 July 1905, Ohannes Sakız Efendi, the Minister of the Sultan's Private Treasury, sent a letter to Sultan Abdülhamid II regarding the Balmumcu farm belonging to the Treasury.[20] At that time, the land of the farm could be leased to others in parcels for an annual fee of forty–six piasters per decare. Tenants also received printed documents that gave them the right to cultivate the land as they wished, plant trees, build houses, and even sell the land. Thus, the farmland had been transformed into a small neighborhood with houses and market gardens around it. As a result of the investigation, it was found that there

16 Ibid., 131.

17 Arzu Terzi, *Hazine-i Hassa Nezareti* (Ankara: Türk Tarih Kurumu, 2000), 100.

18 BOA. Y. PRK. KOM. 7/7, 26 M 1306 (October 2, 1888).

19 Yılgür, "Balmumcu Çiftliği Örneği," 131.

20 BOA. Y. MTV. 275/191, 29 R 1323 (July 3, 1905).

was no record of these individuals and that some of them rented or sold the land they leased in parts to two, three or more people. Such a practice was considered completely illegal by the Treasury, which also administered the Sultan's other farms. The Ministry of Finance was then concerned that if it intervened in the usual way, the tenants would be victimized and complain about the problem. In this case, it was proposed that new leases would be signed after fifteen years for land on which buildings had been erected, ten years for land on which only trees had been planted, and five years for land without buildings or trees that had been left fallow and cultivated. Tenants were also strictly forbidden to transfer their rights to the land to anyone. Moreover, in the event of the death of a tenant, the land was to remain at the disposal of the heirs until the expiration of the lease, after which it was to be returned to the Treasury.

The Eighth Municipal Department of the Municipality also intervened in the issue and reported that the illegal construction at the Balmumcu Farm could not be intervened due to the hesitation of the Municipal Police (Zabıta), although it was in violation of the municipal regulations.[21] The Municipality stated that it would be better to contact the Ministry of Police in order to implement the provisions of the law and take effective measures. The Treasury, however, saw the Municipality as its counterpart in this matter. The Municipality was asked to call the Ministry of Police and stop the illegal construction immediately.[22] As a result, the Treasury issued another report on the extent of the problem of illegal construction on the Balmumcu farm and proposed reasonable solutions.[23] The report stated that during the time of Kemaleddin Bey, the majority of those who constructed buildings, cultivated and occupied land in Balmumcu Farm were palace officials and members. These people disrespectfully demanded from the Treasury the cost of the vineyard stumps and trees they had cultivated for many years, as well as the cost of the buildings they had constructed. In addition, the Balmumcu farm was located in a very important place as it was close to the Yıldız Palace, Şişli and Nişantaşı. It

21 BOA. ML.EEM. 731/69, 6 S 1327 (February 27, 1909).

22 Ibid.

23 BOA. Y.MTV. 309/80, 10 R 1326 (May 12, 1908).

was understood that those who had occupied the land had transferred it to others with ordinary deeds (adi senet) and that if the Treasury did not intervene, foreigners might be among the buyers. For this reason, such places had to be leased in accordance with the procedure. In this regard, the Ministry requested the Sultan's permission to apply to the Treasury to request the relevant authorities to take action by the executive action in case of opposition to the decision.[24] The report of the Ministry of Interior dated 8 September 1909 mentions that the number of buildings in the Balmumcu Farm, which was built without a permission by the officials and employees of the Imperial Privy Chamber (Mabeyn–i Hümayun) during the reign of Abdülhamid II, was enough to form a large neighborhood.[25] The fact that the land was close to the Yıldız Palace may have influenced the formation of such a quarter. The report stated that the Treasury did not benefit from these buildings. If no effective measures were taken, the land in question would fall into the hands of others and the Treasury would be deprived of its right to dispose of it. Since the land belonged to the Waqf of Sultan Bayezid II, it was possible under Sharia law for the Treasury to confiscate the unauthorized buildings. However, the Sultan did not approve of such a proposal because it would result in harassment of the building owners. Instead, what had been decided some twenty years ago was redecided: the right of the Treasury to the land already built on should have been secured, and further building should have been restricted. The new decision forced the occupants of the unauthorized land to be registered by the state, as the government and the Treasury would have benefited from the necessary taxes. In addition, a Treasury official should have been present during the registration process, and the sale and transfer should have been made by the government according to regulations. Since this farm belonged to the Treasury, the expansion of the built environment was never legally allowed and had to be supervised by the Municipality. However, according to the report of 21

24 The relevant authorities: the Second Imperial Division Command (İkinci Fırka-i Hümâyûn Kumandanlığı), the Chief Artilleryman of His Imperial Majesty (Sertüfengî-i Cenâb-ı Şehriyârî'ye), and the Beşiktaş Police (Beşiktaş Zâbıtası).

25 Ergin, *Mecelle–i Umur–i Belediyye*, 3698–3701.

November 1888, which was prepared by the Ministry of Interior in coordination with the officials of the Imperial Register (Defter–i Hakani), illegal buildings were constructed in some areas, although the construction of buildings on the state land without a license was not allowed.[26] As a result, a notification was sent to the provinces, informing them not to build on state land without the Sultan's permission. The issue of taxing the illegally constructed buildings with the tithe tax was reported to the Imperial Register with the decision of the Council of State and the permission of the Sultan. In addition, it was reiterated that officials would be held responsible for unauthorized construction in their districts.

The example of Balmumcu Farm encompassed many aspects of land occupations in Istanbul. The de facto actions of the occupiers, such as building and gardening, combined with the inadequacies of the authorities, led to an illegal proliferation of settlements. One reason was the conflicting policies of state institutions and debates over jurisdiction. Another was the involvement of statesmen, including low–level and sometimes high–level officials, through bribery and other organic mechanisms such as regional fellowship. Despite the concerns of the authorities about uncontrolled changes in public order and the governance of space, such practices persisted and spread at the turn of the century.[27]

§ 4.2 Urban Expansion and Land Development Beyond the City: The Impact of Land Code of 1858

As in the case of the Balmumcu farm, administrative disputes over the jurisdiction of the authorities played an important role in the de facto

26 Ergin, *Mecelle–i Umur–i Belediyye*, 3908–3909.

27 The issue of the construction of a mulberry grove, vineyard and building on the land of the Balmumcu farm in Istanbul, which had been developed through appropriation both before and after the enactment of the Civil Code, was put back on the agenda in 1936 with a document signed by President Mustafa Kemal Atatürk. BCA Catalog no. 30.18.1.2 – 62 /12 / 18. For a comprehensive study of the "occupation" of private farms, see. Elvan Gülöksüz, "Negotiation of Property Rights in Urban Land in Istanbul," International Journal of Urban and Regional Research 26, no. 2 (June 2002): 462–76.

occupation of "empty" miri lands. However, this calls for further investigation, as such unlawful space production was not only due to the state's inability to enforce regulations, but also to the very legal structure that defined the categories of land. As discussed, the extraordinary population growth in the capital had led to the development of new urban areas inside and outside the city. One reason for such uncontrolled and dispersed growth was the changes in the institutionalization of property in the second half of the nineteenth–century.

In fact, this process had begun much earlier, in the sixteenth–century, when the status of miri lands began to de facto transform and, in some parts of the empire, approach the status of mülk lands.[28] Similarly, in the seventeenth and eighteenth centuries, the Ottoman central administration either did not oppose the spread of mülk ownership among its subjects (reaya) or its measures were unsuccessful. It is believed that wealthy urbanites, including military groups, acquired land through more or less illegal means and began producing for the market.[29] Almost nothing is currently known about how miri land was transformed into mülk during this process. One way to legalize this transformation was to plant vines and turn the field into a vineyard, since vineyards were generally considered mülk. Faroqhi states that this method worked in an example from a document dated 1691–92. This text refers to a vineyard planted on miri land, and uses the term mülk in a later sentence. However, it is unlikely that all of the miri lands that were converted to mülk lands were actually used as vineyards.[30]

The process was further accelerated by global integration and Westernization in the nineteenth century.[31] With the enactment of the Land

28 The term "miri", defined in the dictionary as "belonging to the state or treasury, government property," evolved during the Ottoman period to refer to state-owned lands and the taxes collected from these lands. See. M. Macit Kenanoğlu, "Miri Arazi," *İslam Ansiklopedisi*, vol. 30 (İstanbul: Türkiye Diyanet Vakfı, 1988–2014), 441–446.

29 Faroqhi, *Osmanlı'da Kent ve Kentliler*, 320.

30 Ibid., 325–326

31 The Napoleonic Code, which turned land into a commercial commodity, led to the establishment of bourgeois forms of property in France and much of continental Europe.

Code of 1858,[32] a unique piece of legislation, the rapidly changing property relations and land use were regulated and the existing situation was indirectly legitimized.[33] Thus, the rights of individuals to dispose of miri lands (transfer, abandonment, pledging, transfer by title deed, etc.) were expanded and they approached the status of mülk according to the general acceptance in the literature. As a result, the transformation of miri lands surrounding urban settlements into mülk and waqf lands was legally established.[34] The transformation was not a top–down process; rather, the conditions prepared by the local population, which benefited from the conflict between customary law (*örfi hukuk*) and Sharia law, were legitimized by the administration. In the classical Ottoman legal system, the miri lands remained under the state ownership, while the right of disposal was delegated to the subjects.[35] However, according to Islamic law, the right of disposal was considered a form of property right. For example, if one person had the right to dispose of a property and another person had bare ownership, Islamic jurists did not recognize these as two separate rights (ownership and usufruct), but rather as two forms of property rights.[36] The subjects gradually transformed their delegated right of disposal, which had a narrower scope and more limited powers

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This process extended to the countries of the periphery. the process of the commercialization of land was another name for the process of the abolition of feudalism. See. Polanyi, *Büyük Dönüşüm*, 251–252.

32 The Land Code specifically focused on "miri" lands and their disposition, dividing land into two main groups: first, land whose ownership was held by individuals or legal entities such as foundations; and second, land whose ownership belonged to the state, classified as "miri," "mevat," or "metruk."

33 Barkan, *Türkiye'de Toprak Meselesi*,"334–337.

34 Ibid., 367–371.; Yücel Terzibaşoğlu, "A Very Important Requirement of Social Life: Privatisation of Land, Criminalisation of Custom, and Land Disputes in Nineteenth-Century Anatolia," in *Les Acteurs des Transformations Foncières autour de la Méditerranée au XIXe Siècle*, ed. Venessa Gueno and Didier Guignard (Paris: Karthala, 2013), 25–47. Huri İslamoğlu, "Property as a Contested Domain: A Reevaluation of the Ottoman Land Code of 1858," in *New Perspectives on Property and Land in the Middle East*, ed. Roger Owen (Cambridge, MA: Harvard University Press, 2001), 3–61.

35 Bülent Köprülü, *Toprak Hukuku Dersleri I* (İstanbul: İsmail Akgün Matbaası, 1959), 9–25.

36 Cin, *Miri Arazi ve Bu Arazinin Özel Mülkiyete Dönüşümü*, 87–102.

compared to bare ownership under customary law, into mülk by various means, exploiting the gap between the concepts. For example, if a building is constructed or a vineyard and trees are planted on miri land, Islamic law dictates that the land would be governed by the rules that apply to these additions, such as buildings and trees, rather than the rules that apply to the land itself. This was because the land was considered subordinate to these additions. In other words, the bare ownership of miri land was treated as an integral part of the added property, including buildings and fruit trees. Therefore, to transform miri land into property, it was sufficient to build structures or plant vineyards and fruit trees on it.[37] However, this was not an easy task. The holder of the right to dispose of the land had to obtain special permission from the state to construct a building or plant fruit trees on miri land.[38] However, if the holder of the right of disposal planted trees on miri land without permission, and these trees became fruitful within three years without being uprooted, the trees would become the property of the holder of the right of disposal who planted them. According to the Land Code of 1858, the state could not remove these trees after the three–year period.[39] As a result, miri land around cities began to be transformed into property as individuals planted vineyards and fruit trees. In addition, in the late nineteenth–century, miri land was often sold as mülk due to financial deficits in the Imperial Treasury.[40]

In fact, land development by Ottoman subjects was strongly encouraged by certain state institutions such as the Council of State. On 11 August 1890, the Council of State's Internal Affairs Department (Şura–yı Devlet Dahiliye Dairesi) proposed the idea of grafting naturally growing

37 Ibid., 103–119.

38 Ibid., 245–246; Barkan, *Türkiye'de Toprak Meselesi*, 342–343.

39 Article 25 and 81 of the 1858 Land Code.

40 Barkan, *Türkiye'de Toprak Meselesi*, 367–371; İlhan Tekeli, "Mustafa Celalettin Beyin Bir Eyaletin Islah ve İmarı Hakkında Mükaleme Adlı Risalesi ve 19. Yüzyılda Osmanlı İmparatorluğu'nda İmar Kavramının Gelişimi Üzerine Düşünceler," in *Cumhuriyetin Harcı: Köktenci Modernitenin Ekonomik Politikasının Gelişimi*, ed. İlhan Tekeli and Selim İlkin (İstanbul: Bilgi Üniversitesi Yayınları, 2010), 1–26.

trees into fruit–bearing trees so that land could be transformed into property without the need to pay the title deed fee. However, according to the report of the Council of Ministers (Meclis–i Vükela) dated 14 January 1890, the Council warned that allowing this situation, which posed certain risks for the future, could result in wealthy foreigners acquiring the land, leaving no "vacant" land for the settlement of immigrants. The document also emphasized that land development in this way had already been applied to Ottoman subjects and that if the land remained unchanged for a certain period (ten years), a title deed would be granted free of charge.[41] As will be seen later in this chapter, the Municipality also disagreed with the State Council on such agendas, as they would place an additional burden on the uncontrolled growth of the city.

§ 4.3 The Fun is Over in This Market Garden!

The Ottoman modernization movement, which gained momentum in the nineteenth century, encompassed various fields, including law, education, and bureaucracy, and exhibited a dualistic structure that blended traditional and modern elements. Previously, private law had been almost entirely governed by Islamic law.[42] The common law (*droit commun*) included customary law, which supplemented Sharia law where it was incomplete. According to customary law, the Sultan had the right to issue decrees (*kanunname*) on matters other than the provisions of the Sharia.[43] The main source of this duality was the intervention in the field of Islamic law. With the rise of the modernization movement, laws and regulations from Europe, especially from France, began to be adopted.[44] The most important key point of the modernization reforms insisted on

41 BOA. MV. 56/24, 24 Z 1307 (August 11, 1890).

42 Sıddık Sami Onar, "İslam Hukuku ve Mecelle," in *Tanzimattan Cumhuriyete Türkiye Ansiklopedisi*, vol. 3 (İstanbul: İletişim Yayınları, 1985), 580.

43 Coşkun Üçok, "Tanzimattan Önce Osmanlı Devletinde Hukuk," in *Tanzimattan Cumhuriyet'e Türkiye Ansiklopedisi*, vol. 2 (İstanbul: İletişim Yayınları, 1985), 575.

44 Onar, "İslam Hukuku ve Mecelle," 580.

by the bourgeois class and the Western powers was the legal status of private property.[45]

According to the report dated 11 April 1891, which was transferred from the Imperial Register to the Council of State, some market garden owners on Mollagürani Muhtar Street in the Third Municipal Department had requested to convert their market gardens into building plots.[46] The report also referred to the Sultan's Decree of 23 March 1905. According to this decree, since the market gardens in the neighborhoods were very important for the recreation and enjoyment of the residents, the neighborhoods should not be overcrowded by the construction of buildings in the market gardens. Therefore, since the gardens in question were of this type (located in the neighborhood), it was not appropriate to sell them by dividing them into parcels and granting a building permit.

The Council of State, however, took a different view of the matter. In its response, the Council stated that: (1) The residents of the neighborhood does not have the right to enter the market gardens of individuals without permission for their own enjoyment. (2) Not allowing the conversion of the market gardens in the neighborhoods into building plots, that is, leaving them as they are, would limit the rights of their owners to benefit from them. It would create victimization. (3) It was the duty of the Municipality to create public promenades or gardens (*tenezzüh mekanı*) for the residents of the neighborhood. Based on these justifications, the Council of State lifted the ban on the development of the market gardens between neighborhoods. According to the Council, private property is an indisputable concept, and therefore, if the transformation of these gardens into open spaces and parks for recreational purposes was necessary, it should have been done formally, that is, through expropriation.

45 Cerasi, *Osmanlı Kenti*, 63.

46 Ergin, *Mecelle–i Umur–i Belediyye*, 4105–4107.

§ 4.4 Planning the "Empty" Plots

As discussed earlier, legal reforms throughout the nineteenth–century introduced new frameworks that sometimes created confusion. This created conditions in which the gaps between legislation and actual practice could be exploited by interested parties. A relevant example can be found in Articles 16 and 18 of the 1882 Building Code (Ebniye Kanunu). These articles required owners of vineyards, market gardens, and vacant land in and around the city to construct infrastructure and public service buildings if they wished to legally convert their land into building plots. However, as will be shown, the holders of disposal rights took advantage of a legal loophole created by the vague language of these articles to engage in unauthorized construction activities.

The new laws and regulations of the nineteenth–century related to buildings and streets aimed to control urban growth, reorganize fire safety measures, and transform cities into places of prestige.[47] In addition to planning for the "empty" areas affected by the fires, the city government also focused on regulating the construction process of market gardens and farms developed for urban growth.[48] In this direction, between 1848 and 1882, six regulations were introduced to control the urban space.[49] In 1882, a kind of modern zoning law called the Building Code was enacted and remained in force for 50 years, until 1933. It contained specific articles (especially 16 and 18) relating to the regulation of building activities in vineyards, market gardens and vacant land.[50] With these

47 Melih Ersoy, *Osmanlı'dan Günümüze İmar ve Yasalar* (İstanbul: Ninova Yayınları, 2020), 25.; Çelik, *Değişen İstanbul*.

48 See. Burcu Arıkan, "A Mode of Space Production in the Nineteenth Century: İcadiye Neighborhood as a Case of İfraz" (Master's Thesis, Boğaziçi University, 2021); Eda Güçlü, "The Transformation of Waqf Property in the Nineteenth Century Ottoman Empire" (Master's Thesis, Sabancı University, 2009).

49 These regulations are: 1848 Building Regulation, 1858 Regulation on roads, 1863 Regulation on Roads and Buildings, 1875 Regulation on the Construction of Buildings in Istanbul and its Vicinity (*Bilad–ı Selase*), 1877 Istanbul Municipal Law, 1882 Building Code. See. Çelik, *Değişen İstanbul*, 65.

50 The 1882 Building Code was abolished in 1891 but was reinstated ten months later.

articles, the authorities aimed to prevent uncontrolled development driven by the increasing demand for settlement and to shift part of the financial burden of urbanization to the Ottoman subjects, given the severely inadequate budget.

According to Article 16, those who wanted to erect buildings on vineyards, market gardens, and vacant plots, or sell them by dividing them into parcels to form a neighborhood, had certain responsibilities. Landowners were required to provide land free of charge for the construction of a police station and school, if necessary, and to construct sidewalks and sewers to the end of the neighborhood boundaries according to the prescribed methodology. In addition, land owners were required to submit a petition and map to the municipality. In this way, the municipality would have been able to correspond with the relevant institutions to examine whether buildings in this type of area would have caused any harm and whether there was a need to construct police stations and schools in this area. If the studies revealed no obstacles, then streets would be drawn on the map in accordance with the provisions of the law. The locations of schools and police stations would be indicated and submitted to the Ministry of Interior, and if the Sultan gave permission, an official license would be issued.

According to Article 18, the following conditions were to be considered for approving the construction of mansions (köşk) on plots of no less than one decare within vineyards and market gardens in the countryside of the city, such as Kadıköy, Çamlıca, and the Bosporus. Owners of vineyards and market gardens were required to apply to the Municipal Engineering Office (Şehremaneti Hendesehanesi) for the preparation of two maps showing the boundaries and size of the areas to be allocated, along with the payment of the necessary fees. The building permit would then be issued once these maps had been approved by the Engineering Office and the Municipal Council (Şehremaneti Meclisi). One map was to be given to the landowner, while the other was to be kept by the Engineering Office. (Figure 4.2 and 4.3)

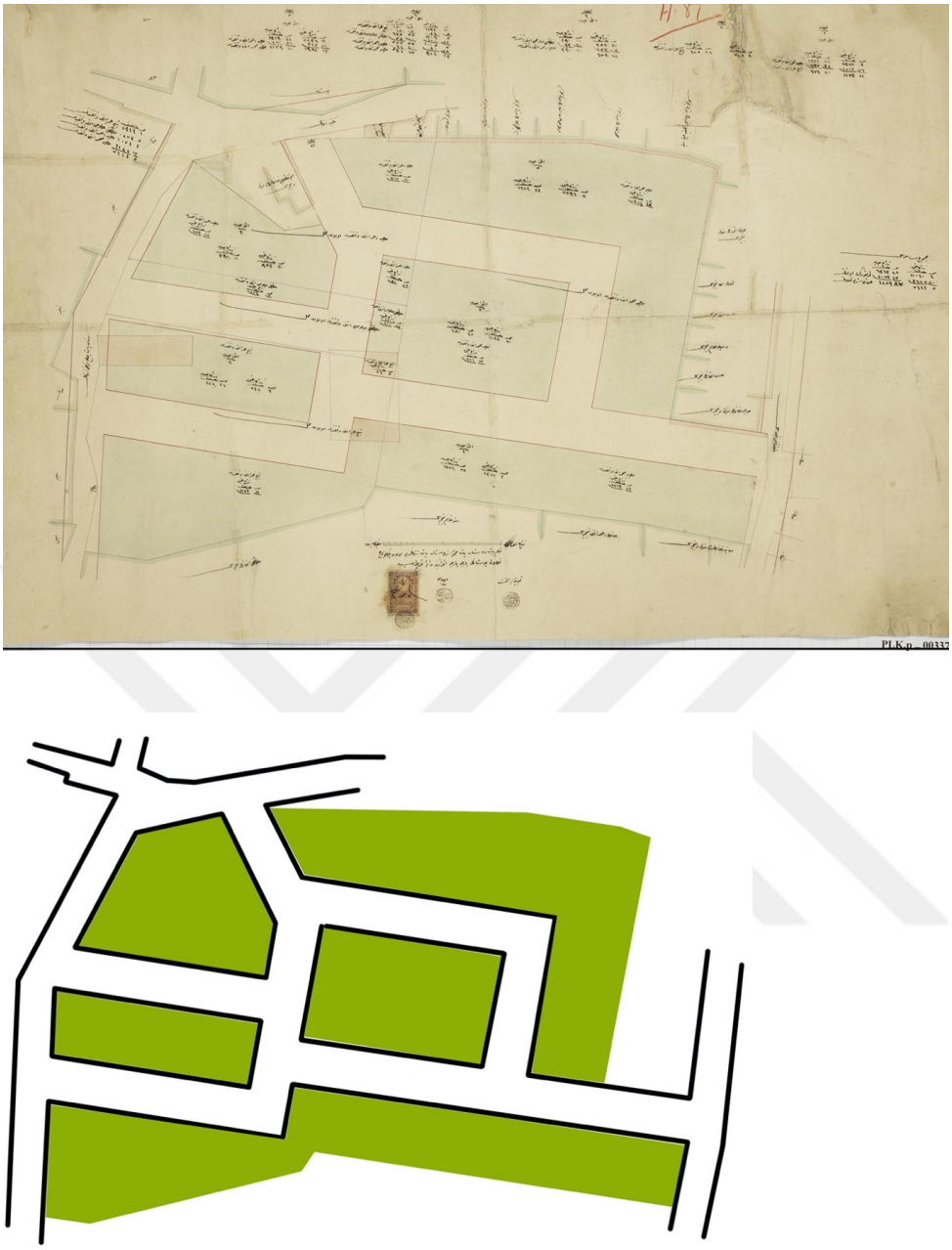


Figure 4.2 The plan showing the division of market gardens numbered 10 and 23 on Sinan Paşa Street in the Sinan Paşa neighborhood of Kasımpaşa. SOURCE: BOA. PLK. p. 337 (July 23, 1896).

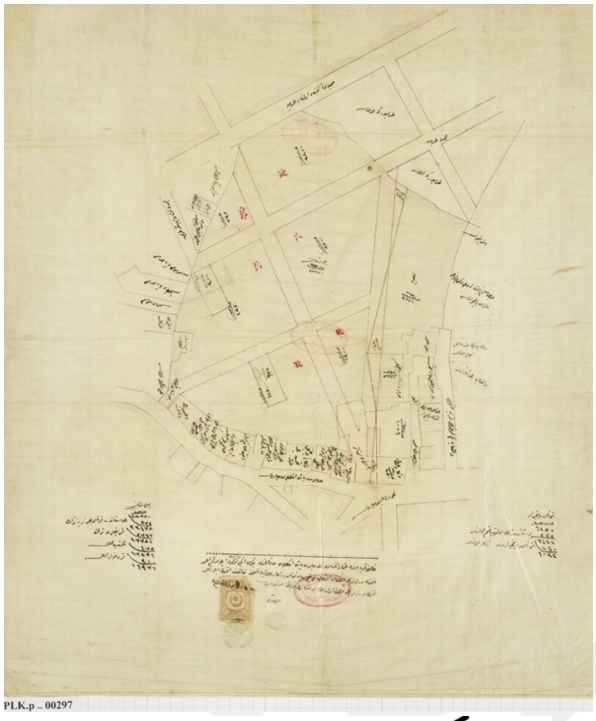




Figure 4.3 The plan of two market gardens numbered 20 and 10 on Çavuşbaşı İskelesi Street in the Osmanağa neighborhood of Kadıköy. The blue shaded areas are for a school and a police station. SOURCE: BOA. PLK. p. 297 (December 26, 1894).

As comprehensive as the law was, it proved ineffective in dealing with rapid developments and emerging challenges. A subtle nuance or legal loophole between these two articles allowed individuals to evade the obligations imposed by the law. As a result, the gap between the legal framework and de facto practices continued to widen. Under these conditions, the landowners tried to take advantage of the loopholes in the law in order to easily obtain building permits and to sell their land by dividing it into parcels, as highlighted by a report of the Ministry of Interior dated 30 May 1906, which conveyed the decision of the Council of State on how the ambiguity between the articles was being exploited.[51] According to Article 16, the Sultan's permission was required for the sale of vacant plots, vineyards, and orchards in pieces for the construction of buildings. In addition, this article stipulated that landowners had to fulfill the aforementioned public requirements. However, Article 18 of the same law allowed construction only with the approval of the municipality, provided that the land was not less than one decare. As a result, landowners along the Bosporus and in the villages surrounding the city, such as Kadıköy and Çamlıca, began selling their land in one–decare plots under the more lenient terms of Article 18, bypassing the Sultan's approval and public requirements. The buyers could then built buildings without having to provide public services. They could also sell portions of land to others by forming a hisse–i şayia, (the specific shares of co–owners in a jointly owned property), thus circumventing the limitations of Article 18 regarding the size of land. In practice, most landowners subdivided their land into smaller plots and sold them without official approval, leading to unauthorized construction and evasion of municipal supervision altogether. As Osman Nuri Ergin, the municipal secretary of the time, noted, this led to the transformation of Istanbul's most picturesque resorts into shantytowns and slums. After the Second Constitutional Era was declared in 1908, illegal plots and buildings were legalized and subjected to taxation

Finally, the government, constrained by a limited budget, stipulated that the conversion of market gardens and similar areas into building

51 Ergin, *Mecelle-i Umur-i Belediyye*, 3650–3651.

plots could only be carried out if certain municipal obligations were met, thus shifting the burden of rapid urbanization to the subjects. However, the cumbersome nature of the law and its excessive obligations failed to meet the needs of the housing market, which had become more active due to rapid population growth. This ultimately paved the way for the exploitation of certain loopholes in the law and contributed to the unregulated expansion of the city to the detriment of urban agricultural areas.

§ 4.5 "Little Istanbul" of Dreams

As the blurred boundaries of the rapidly growing city expanded, the municipality's efforts to control and regulate urban space, including the provision of urban services, became increasingly difficult and costly, especially when compared to other European cities. Istanbul, with an area of 43 square kilometers, had expanded uncontrollably to the extent that it could accommodate several times its current population compared to other contemporary cities. The reasons for this situation include escape from the pressures of the previous administrations (urban management rules, taxes, etc.), the possibility of acquiring more land, escape from epidemics and high cost of living.[52] Thus, the population of Istanbul moved outside the city walls and to distant areas such as the Bosphorus, Kadıköy, the islands, the Anatolian and Rumelian railroads. As a result, new districts were built around the city. Thus, Dersaadet and Bilad-ı Selase were extended to Kavaklar in the north, Ayastefanos in the west, Bulgurlu in the east and Pendik in the south. In addition, new neighborhoods were built around the city, leading to the emergence of slums. Meanwhile, the municipality was unable to address the deteriorating condition of the city, build sewers and pavements in new settlements, and provide basic services such as city lighting. It also struggled to provide modern infrastructure, including water, electricity, and trams, even with concessions. In addition, the government struggled to maintain public

52 Ergin, *Mecelle-i Umur-i Belediyye*, 3698–3701.

order, expand education, and manage spending with tax revenues that were insufficient for both state and municipal needs.

The uncontrolled growth of the city began to pose a serious problem for the authorities. Due to the lack of sufficient resources for urban services, the Municipality sought a solution by compacting the city and developed various methods to achieve this goal. One of these methods was proposed in the report prepared by the Technical Committee of the Municipality (Şehremaneti Heyet–i Fenniyesi) on 7 June 1916.[53] According to the report, the capital could not be rebuilt with regular avenues, streets and squares worthy of its glory and age. This unique city, which until forty or fifty years ago had been the home of various rich people, from the poorest individuals to the greatest statesmen, has been abandoned, neglected, and left in ruins. Slums and depressed areas have sprung up around the city. In addition, the neighborhoods of Çırçır, Aksaray, İshak Paşa, Balat, Mercan, Yerebatan, Tophane, and Cihangir, which are relatively the most developed parts of Istanbul, were hit by one big fire after another, causing great destruction. According to the report, twenty–two major fires occurred in the seven years between 1908 and 1915, burning approximately 9,000 different properties and 1,500 decare. This has exacerbated the devastation of the city. What is more, according to the report of the Technical Committee, one of the reasons for the aforementioned immigration from the center to the periphery was the interest of the Rumelian and Anatolian railways, which were owned by foreign companies. Although the expenditures of the municipality were considerable, its budget was quite inadequate compared to its European counterparts.

Under these circumstances, the report states, it is in the public interest to limit the freedom of individuals to settle where they wish. For example, neither the government nor the municipality should bear the costs caused by individuals who subdivide and sell large parcels of land on the outskirts of the city in order to make a quick fortune, or by those who settle there without justification, resulting in unnecessary administrative expenses. According to the Municipality, from now on, the

53 Ibid., 3698–3701.

requests for the formation of neighborhoods by dividing the land inside and outside the city should be implemented in accordance with the authority granted by articles 16 and 18 of the Building Law, the repeated decisions of the Council of State and the following articles. According to Osman Nuri Ergin, the report prepared by the Technical Committee of the Municipality included four articles on how the development of Istanbul could be directed, along with a map related to these articles. Although the original map was not available, the boundaries described in the report are shown as part of this dissertation.(Figure 4.3).

On this map, Istanbul and its surroundings were divided into three sections: the “Small City”, the “Residential Neighborhoods” and the “Non-Residential Neighborhoods”. The boundary of the Small City started from Yedikule, followed the city walls to Ayvansaray, then left Eyüp outside, crossed to the opposite shore, passed through Halıcıoğlu and Okmeydanı, followed Büyükdere Caddesi from Şişli, continued from the ridge above Ortaköy to Defterdar Burnu. From there, it crossed over to the Anatolian side and went up the stream separating Beylerbeyi and Kuzguncuk to İcadiye, then followed Nuhkuyusu Road to Selimiye, and from Selimiye it went along Bağdat Road and ended at Kalamış Bay. The areas outside this boundary were called "outside the city" (haric–i şehir) and were divided into two parts: "residential" and "non–residential". As explained in Article 2, the segments that showed the directions of the city's growth in the non–residential areas were marked with blue paint, and it was requested that no subdivision be allowed outside of them. The articles were as follows:

1 In the original map, parcellation within the innermost ring (indicated by a green line on the map) can only be carried out on urban land plots where no agricultural production is conducted. The subdivision of market gardens within this boundary may be carried out only if the Municipality deems it necessary, take into account the public needs of the city.
2 Outside the city center, the parcels of uninhabited parts between the inhabited areas (which may be parallel to the coast) cannot be smaller than forty square arshin *(arşın)*.

3 It is not allowed to divide into parcels the public places that are in the form of groves, pine groves, forests, that are accepted as a place of visitation, that have been a place of entertainment for the public since ancient times, that contain historical artifacts and water sources (springs, etc.).
4 Subdivision of land in areas not covered by these three points cannot be authorized under any circumstances, as it would lead to uncontrolled urban growth. However, if the government deems it necessary to establish neighborhoods for the poor, workers, immigrants, etc., in such areas, construction will be permitted after the municipality draws up maps.

According to Osman Nuri Ergin, the main reason why the Technical Committee prepared such a report was to ensure the maximum development of the original Istanbul, known as the "Small City," despite the lack of municipal revenues. He emphasized that this approach was common in all civilized countries but, argued that such a report would have no practical value unless it was enacted into law by the Council of State. To illustrate this point, He provided an example. According to the municipality's decision, Mr. İhsan, a former governor of Beyoğlu, applied to the municipality to divide approximately 26 decare of his land in Çamlıca. The Municipality rejected the application based on the decision of the Technical Committee. Mr. İhsan then appealed to the Council of State. On 23 December 1916, the Council of State ruled that the division of the land was not in contradiction with the Building Code of 1882. This decision set a legal precedent and ensured that the municipality would approve landowners' requests to convert their market gardens into building plots.



Figure 4.4 The red line was drawn to indicate the municipal boundaries at the end of the nineteenth–century, while the blue lines to represent the "small city" boundaries proposed by the Technical Committee of the Municipality. SOURCE: The Map of Necib Bey (1918).

§ 4.6 The Ambiguity of Authority in the City

Until the nineteenth–century, the imperial administration had delegated certain urban services, such as education and health, to local groups, religious communities, and waqfs. These groups and waqfs, which more or less corresponded to the municipal institutions of the pre–modern period, had over the years become unable to keep up with the demands of the times.[54] In a period of centralization, one of the bureaucratic reforms led by the state was the attempt to establish a municipal organization in an "almost" modern sense.[55]

The Municipality was established on 16 August 1855 by the modern central government to dismantle the traditional organizations and structures of urban administration. The changing economic and social structure in several cities, especially in the capital and other port cities, required a new urban organization to meet the emerging needs. The acceptance and implementation of municipalism in the modern sense in Istanbul was influenced by the inability to provide urban services (such as water supply, transportation, infrastructure, zoning, artisan control, lighting, cleaning, road construction, etc.) within the existing system.[56] The observations and criticism of foreign troops (British, French and

54 Within the existing system, waqfs were not flexible enough to make investments to improve their sources of income or adapt to new conditions. Moreover, by the 19th century, the government had confiscated public property allocated to illegitimate foundation institutions and transferred it to the treasury. In parallel, local services previously provided by the trustees of foundations were transferred to the central government organization. Additionally, the Ministry of Awqaf, established in 1826 as the central authority for collecting and supervising waqf revenues, was incorporated into the government. See. Tanyeli, "Anadolu ve Türk Kentinde Fiziksel Yapının Evrim Süreci," 187; Osman Nuri Ergin, *Türkiye'de Şehirciliğin Tarihi İnkişafı* (İstanbul: Cumhuriyet Gazetesi Matbaası, 1936), 5, 46–59.; İlber Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," in *Tanzimattan Cumhuriyete Türkiye Ansiklopedisi*, vol. 1 (İstanbul: İletişim Yayınları, 1985), 232.;

55 Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," 240–243.

56 Ergin, *Türkiye'de Şehirciliğin Tarihi İnkişafı*, 122; Tarkan Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," in *Büyük İstanbul Tarihi*, vol. 3, 140.

Italian), experts and politicians who visited the city during the Crimean War (1853–1856) were also very influential.[57]

The central government wanted to established a modern municipal organization under its control. The goal was to create a prosperous, clean, and well–organized capital city according to Western standards.[58] The main tasks expected of the municipality were to provide food, build and repair roads and pavements, carry out cleaning work, and control prices, quality, measurement, and weighing by controlling bazaars and merchants. However, because the organization did not have full autonomy, it had to share the revenues from these tasks with central government ministries. For example, the organization was in contact with the Ministry of Finance for the collection of taxes levied on merchants and the transfer of some of them to the Imperial Treasury; with the Ministry of Commerce (Ticaret Nezareti) for regulations and services related to merchants; with the Ministry of Public Works for issues such as construction, public works, and cleaning the city; and with the Ministry of Police for issues related to trade and the police.[59]

In addition, in order to carry out the duties assigned to them by law and regulation, municipalities had to undertake commercial and economic initiatives that would generate revenue for their coffers. These

57 After the arrival of the British and French navies in Istanbul, the foreign population of the city increased. Many people from Europe, including soldiers, rear staff, journalists, health workers, diplomats and others, came to Istanbul. Due to the war, the area where most of the newcomers settled was the Beyoğlu-Galata area. These foreigners often expressed their dissatisfaction to the government because they could not find the same standard of living they were used to in their home towns. They demanded that the situation in Istanbul be improved. The demands of Ottoman citizens and foreigners in the Galata-Beyoğlu area for the introduction of modern municipal structures and services from European cities to Istanbul had a significant impact on changes in the city's governance. See. Oktay, "Tanzimat'tan 21. Yüzyıla İstanbul'un Yönetimi," 140; Ergin, *Türkiye'de Şehirciliğin Tarihi İnkişafı*, 122.

58 Cavid Baysun, "Mustafa Reşit Paşa'nın Siyasi Yazıları," *Tarih Dergisi* 11, no. 15 (1960): 124; Bayram Kodaman, "Mustafa Reşit Paşa'nın Paris Sefirlikleri Arasında Takip Ettiği Genel Politika," in *Mustafa Reşit Paşa ve Dönemi Semineri Bildirileri* (Ankara, 1987), 73; Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," 240–243.

59 Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 140.

initiatives included the operation of trams, buses, and marine transportation vehicles; the construction of electricity, gas, and water facilities; and the establishment of facilities to prepare and sell food at affordable prices, such as markets, slaughterhouses, mills, bread and ice factories, and so on. However, since there was no strong municipality in Istanbul, these services were provided by granting concessions to foreign companies.[60] Thus, the Municipality was shaped by laws enacted at different times and functioned as an institution with an extremely inadequate budget, which was neither fully supported nor neglected by the central government.

In 1856, after the failure of the Municipality, a Commission for Urban Order (İntizam-ı Şehir Komisyonu) was established. After that, it was planned that the Istanbul Islands and the Bosporus would be divided into 14 municipal departments and gathered under a single administration. Before the implementation, Beyoğlu District (6th Department) was selected as a pilot region.[61] This was due to the fact that the region was the most socially, culturally and economically integrated commercial and residential area with Europe. As a result of the success of the Beyoğlu Municipal Department, the Regulation of Istanbul Municipal Administration (Dersaadet İdare–i Belediye Düzenlemesi) was issued on 6 October 1868, in order to extend this method of municipal administration to the whole of Istanbul.[62] In this law, the boundaries, functions, structural characteristics and responsibilities of the municipality were comprehensively considered.[63] With the new regulation, the Municipality took over important responsibilities such as zoning and road construction,[64] building

60 Ergin, *Türkiye'de Şehirciliğin Tarihi İnkışafı*, 141–142.

61 Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 144–150.

62 *Tanzimat'tan Cumhuriyet'e Osmanlı Hukuk Mevzuatı* I, vol. 2, 450–459.

63 Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 153.; Ergin, *Türkiye'de Şehirciliğin Tarihi İnkişafı*, 128.

64 As responsibility for urban development in Istanbul was largely transferred to the Municipality, the Building Council (*Ebniye Meclisi*) was established to exercise this authority. Until 1868, Directorate of Imperial Buildings (*Ebniye-i Hassa Müdüriyeti*) was responsible for building and road works in areas outside the Beyoğlu Municipal Department.

fireplaces,[65] the opening of roads, and water management.[66] In addition, some tax revenues (such as property tax, etc.) were also included in the municipal budget.[67] However, the municipality had dependent revenues, a limited budget, and an inadequate staff. Its expenses were paid by the state, and the revenues it collected went into the coffers of the Ministry of Finance.[68] For example, the collection of property tax was left to the government because the municipality was not effective in collecting taxes. Water management was also returned to the Ministry of Awqaf in 1908.[69] Moreover, the revenue from waqf went to the central administration, not to the local governments. In short, the fact that the economic power of local groups did not increase at the same rate as the strengthening of the central government meant that local governments did not develop sufficiently in terms of economic and legal autonomy.[70] Due to the lack of budget allocations for administrative staff, most of the fourteen municipal departments that were to be established under the 1868 Regulation of Istanbul Municipal Administration could not be established because they did not have "a structural and technical infrastructure suitable for the functions assigned to them".[71] The aggregate boundaries of these fourteen administrative units formed the boundaries of the Istanbul Municipality. However, these boundaries were not realistically drawn considering socio–economic factors (income status, population density,

After this date, the responsibility was transferred to the Municipality. See. Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 157.

65 The *Islah-ı Tarik* Commission, which was responsible for the reconstruction of fire-damaged areas and the opening of streets in Istanbul under the Ministry of Public Works (*Nafia Nezareti*), was abolished. See. Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 158.

66 Water management was among the responsibilities of the Ministry of Awqaf.

67 Musa Çadırcı, *Tanzimat Döneminde Anadolu Kentleri'nin Sosyal ve Ekonomik Yapıları* (Ankara: Türk Tarih Kurumu Yayınları, 1991), 273–275.

68 Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," 242.

69 Çadırcı, *Tanzimat Döneminde Anadolu Kentleri'nin Sosyal ve Ekonomik Yapıları*, 273–275.

70 Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," 236.

71 Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 159–160.

etc.) and spatial characteristics.[72] This eclectic structure meant that neighborhoods within the same municipal boundaries did not benefit from urban services (such as roads, sewers, and water) to the same extent. For example, "the need for gas in the Beyoğlu area was a luxury for Kasımpaşa."[73] For this reason, under the conditions of the time, municipal departments could only be established in modern bourgeois districts (Beyoğlu, Tarabya, Adalar, Yeniköy, Beykoz and Kadıköy), while others could not be fully established. Thus, the 1868 regulation, which can be described as an attempt to codify the jurisdictional and organizational scheme of the municipality, did not produce the desired results in practice. As a result, a new municipal organization was introduced.[74]

Istanbul's administrative model, which consists of the central municipal administration and district departments, was retained in the new law, as it was in the previous law.[75] However, with this law, the of Beyoğlu Municipal Department which was directly attached to the Grand Vizierate and provided with special facilities, was reduced to the same status as other municipal departments. In addition, the number of municipal departments in Istanbul was increased to 20 and the municipal boundaries were reorganized so that the municipal departments in the city center had higher population densities and covered larger areas than those in the periphery. The goal was to create a more compact city and increase the municipality's service capacity.[76]

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72 İlber Ortaylı, *Tanzimat Devrinde Osmanlı Mahalli İdareleri (1840–1880)* (Ankara: Türk Tarih Kurumu, 2000), 162.

73 Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," 243.

74 Çadırcı, *Tanzimat Döneminde Anadolu Kentleri'nin Sosyal ve Ekonomik Yapıları*, 273–275.

75 Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 161.; Osman Nuri Ergin, *İstanbul'da Şehirciliğin Tarihi İnkişafı*, 129.

76 Ibid., 163.

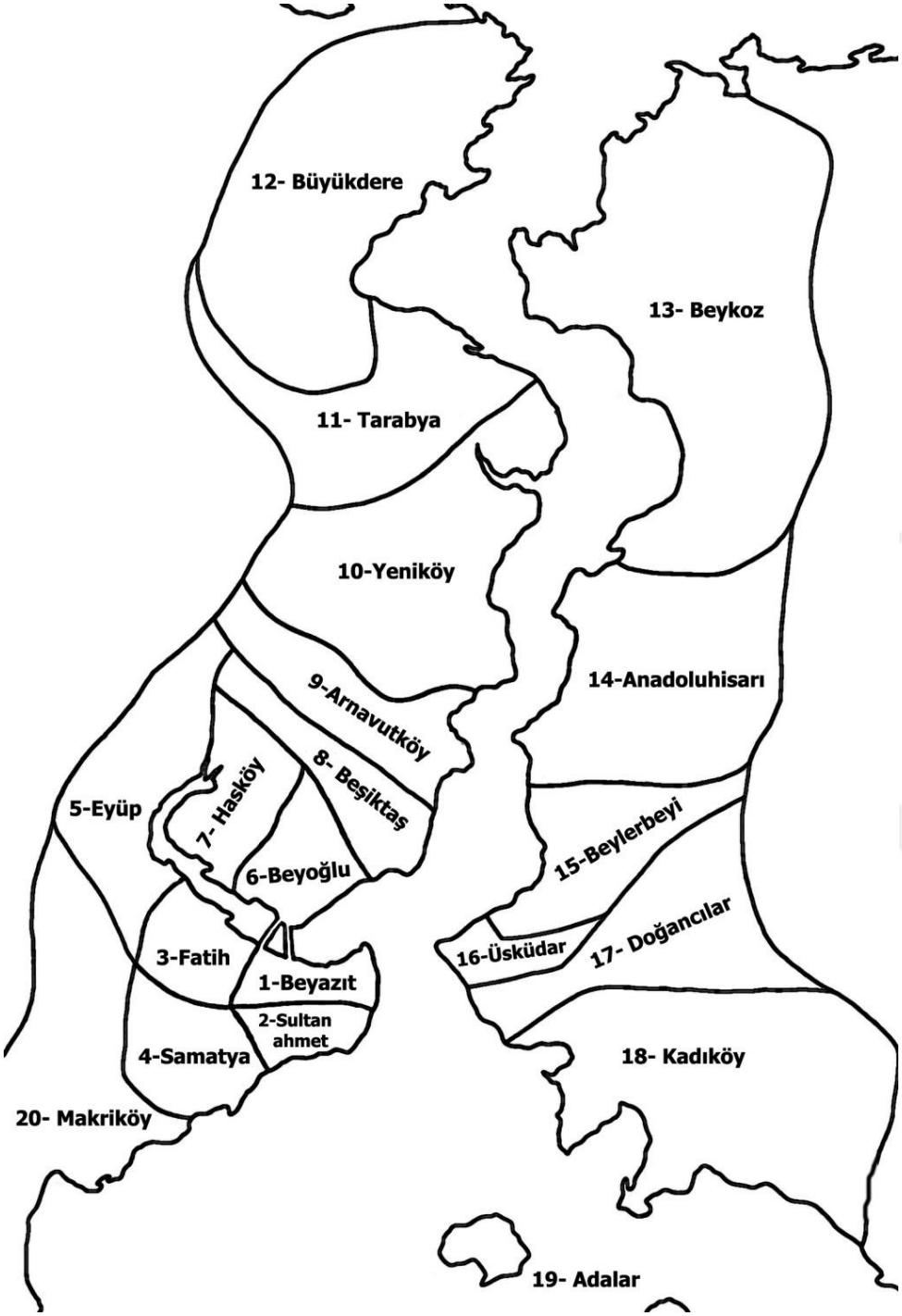


Figure 4.5 The municipal departments and boundaries of Ottoman Istanbul in 1909. SOURCE: Oktay (2015).

According to the new Istanbul Municipality Law (Dersaadet Belediye Kanunu), the boundaries of Istanbul were defined as follows: On the European side, it started from Rumeli Feneri in front of Zekeriya and Bahçe villages and extended to Ayazağa Farm, Kağıthane, Alibeyköyü, Küçük Köy, Rami, Davutpaşa and Hazinedar farms and Ayastefanos; On the Anatolian side, it covered the neighborhoods within the line from Bostancıbaşı Bridge, including the islands, through Erenköy, Kozyatağı, Merdivenköy, Libadiye, Çakaldağı, Göksu Creek, Akbaba and Kabakoz villages to Anadolu Fener.[77] In this model, which consisted of the municipality and its subordinate district departments, the authority was mainly vested in the municipality, while the power of expropriation belonged to the district departments. In the area of water services, the authority was shared with the Ministry of Awqaf.[78] Although the Municipality Law expanded the scope of district departments on paper, many of these departments had not yet been established. As a result, local services were disrupted in many parts of Istanbul. In order to save budget, the regional division used for the collection of property tax in Istanbul was also applied to the district departments. As a result, some regions were merged and the total number of district offices was reduced from 20 to 10.[79] This model remained in use until 1908.

Despite the establishment of the Istanbul Municipality, the supervision of waqfs, which should be functionally linked to local governments, has not been entrusted to the municipality.[80] In this context, the municipality functioned both as a symbol of prestige to impress Westerners and as a facade to channel citizen grievances. Certain urban services, such as trams, ferries, and lighting, which could have generated revenue for the municipality, were instead tendered out by the central government to foreign companies, with the resulting revenue transferred to the treasury. In addition, various ministries claimed a share of revenues that rightfully belonged to the municipality, such as property taxes. The organization of

77 *Tanzimat'tan Cumhuriyet'e Osmanlı Hukuk Mevzuatı* I, vol. 4, 520–538.

78 Oktay, "Tanzimattan 21. Yüzyıla İstanbul'un Yönetimi," 164

79 Ibid., 165–166.

80 Ergin, *Türkiye'de Şehirciliğin Tarihi İnkışafı*, 73.

Istanbul's waterworks also underwent several changes. Initially established in 1826 under the Ministry of Awqaf, they were transferred to the municipality in 1877, only to be returned to the Ministry of Awqaf in 1908.

Finally, the municipality in the modern sense was a relatively new institution in the Ottoman Empire. It had a very limited budget and authority, which was shared with the Council of State, the Ministry of Police, the Ministry of Public Works, the Ministry of Commerce, the Ministry of Awqaf, and the provincial governorates. This confusion of authority in urban administration, combined with budgetary constraints on all fronts, resulted in an explicit inability to control urban growth and provide urban services.

§ 4.7 Limited Municipal Services of the Fragmented City

Rapid urbanization around the world has led to the development of concepts such as urban sanitation and public health, as well as new approaches and methods to urban space, including the construction of sewerage systems, street cleaning, garbage collection, out–of–town burials, and the provision of clean water supplies, among others. The agglomeration of urban populations was a major factor in the emergence of public health and sanitation laws and regulations.[81] The state began to invest in this area, which played a key role in shaping the modern city. As problems of hygiene and safety became more visible in urban centers, especially in affluent areas, planning and infrastructure began to be approached holistically. Health and sanitation laws enacted in Western industrialized countries were particularly influential in the development of modern urban planning. For example, the British Public Health Act of 1848 addressed issues directly related to the city, such as the establishment of sewerage and street systems and their connection to roads, the location of dwellings in sunny and airy locations, the provision of clean water, the

81 İsmail Yaşayanlar, "Osmanlı Devleti'nde Kamu Sağlığının Kurumsallaşmasında Koleranın Etkisi," in *Osmanlı'dan Cumhuriyet'e Salgın Hastalıklar ve Kamu Sağlığı*, ed. Burcu Kut and İsmail Yaşayanlar (İstanbul: Tarih Vakfı Yurt Yayınları, 2017), 3.

collection of solid waste, the location and supervision of slaughterhouses and marketplaces, and the creation of parks in cities.[82]

The literature on Ottoman urban and planning history shows that urban development activities in this period differed from those in European countries. While political power in Europe was focused on addressing problems such as health and public order arising from industrialization and poor working class neighborhoods, the Ottoman agenda was to modernize the city and make it as westernized and prestigious as possible, while also focusing on fire prevention.[83] A key factor is that the settlement within the city walls, which constituted the main body of Istanbul, was burned, demolished, left empty or turned into ruins. This was very much on the agenda of the administrators. On the other hand, the phenomenon of post–war (1877–1878 Ottoman–Russian war) immigration, whose patterns differed from those of industrialized Western cities, was also a priority item on the plan. Successive waves of immigration brought with them problems of housing, hygiene, public order, etc., which affected many cities of the empire, especially Istanbul.[84]

Throughout the nineteenth century, the existing infrastructure of the Ottoman city was extremely inadequate in the face of urban population growth due to immigration. At the same time, the city was fragmented into parts that moved away from the center.[85] Especially in the second half of the nineteenth–century, with the development of transportation facilities, the city expanded in different directions along the transportation lines. The settlements of Eyüp, Yedikule, Makriköy and Ayastefanos

82 Ersoy, *Osmanlıdan Günümüze İmar ve Yasalar*, 37.

83 Throughout the 19th century, many large fires occurred, particularly in the walled area of the city, which had the highest population density, causing significant damage to the urban space. Special committees were set up to plan the areas affected by the fires. See. Ergin, *Türkiye'de Şehirciliğin Tarihi İnkişafı*, 123; Ersoy, *Osmanlıdan Günümüze İmar ve Yasalar*, 19.

84 Despite all the controls and measures, the wave of migration from the periphery of the empire to the capital, Istanbul, had created slums around the city. See. Tekeli, "Tanzimattan Cumhuriyet'e Kentsel Dönüşüm," 878–882.

85 Osman Nuri Ergin, *Cumhuriyet ve İstanbul Mahalli İdaresi* (İstanbul: Türk Anonim Şirketi, 1933), 40.

developed outside the city walls. In addition, new settlement axes (such as the Taksim–Şişli line, the Tophane–Dolmabahçe coastal line, and the Teşvikiye–Nişantaşı line) emerged on the northern side of the Golden Horn.[86] In an effort to meet the growing needs of such a disorganized and sprawling city, the city government resorted to quick and haphazard solutions. Attempts to divide and widen streets turned the city into a perpetual construction site.[87] Many urban services, such as electricity, transportation, and sewage infrastructure, which were in high demand by the city's residents and in some cases contracted out to foreign companies, could not be adequately provided due to the limited budget.[88]

Although they had different priorities, the most prominent motivations of the ruling elite regarding urban space were more or less along the same lines: a clean and beautiful city organized according to western standards.[89] In this direction, radical proposals such as the complete demolition of Istanbul's city walls, massive expropriation by the municipality and the modernization of the sewerage system have been put forward by various newspaper and magazine writers.[90] The problems of the city, especially the failures of the municipality, were very much on the agenda of the middle and lower classes, as well as the administrators. The regulations prepared by statesmen for western–style urbanization

86 Çelik, *Değişen İstanbul*, 48–50.

87 Hamdi Özdiş, "19. Yüzyıl Mizah Basınında 'İstanbul'da Şehirli Olmak,'" *Kebikeç* 19 (2005): 26.

88 Nurçin İleri, "İmtiyazlı Şirketlere Yönelik Şikayetler: İstanbul Terkos Su ve Tramvay Şirketlerinin Millileştirilmesi," *Toplumsal Tarih Akademi* no. 2 (2023): 25–51; Nurçin İleri, "The Politics of Electricity Use and Non-Use in Late Ottoman Istanbul," *History of Science* (2024): 1–28; Y. Can Gümüş, "Alt Yapıları Görünür Kılmak: Geç Osmanlı İstanbulu'nda Tifo, Kolera ve Toplumsal Eşitsizlikler," in *Bitmeyen Hikaye: Küresel Salgın Çağında Tarihe Yeniden Bakmak (Salgın Hastalıklar ve Kamu Sağlığı Pratikleri*), ed. İsmail Yaşayanlar (İstanbul: Tarih Vakfı Yurt Yayınları, 2022), 115–146; K. Mehmet Kentel, "Pera Kasımpaşa, Sewers, and Maps," 405–414; Kentel, "Pera'nın Atığı, Kasımpaşa'nın Salgını: 1893–1894 Kolera Salgınını ve Çevre Adaletsizliğini Haritalandırmak," *Toplumsal Tarih Akademi* no.2 (2023): 52–71.

89 Özgür Türesay, "Modernleşme, Medeniyet ve Şehircilik Üstüne: Ebüzziya Tevfik'in Şehircilik Yazıları," *Kebikeç* 15 (2003): 5–6.;

90 Ibid., 7.

contrasted with the texts and images in humor magazines describing the difficulties of everyday urban life. However, the shortcomings of municipal services were not only related to the failure of the administration. The main problem was the budget.[91] Due to financial constraints, urban services were not evenly distributed. Moreover, the criteria for "distribution" had shifted significantly. Unlike in previous centuries, it was no longer possible to explain the differentiation of residential areas in the nineteenth–century city solely within the framework of the *millet* system.[92] In this regard, class differentiation also emerged as a factor to be considered. It was most evident between the inner city and the suburbs, as the wealthy moved out of the city limits in parallel with the development of transportation facilities. Even between two neighborhoods within the same municipality, deep gaps in organization and wealth began to be observed. For example, epidemics (such as cholera, typhoid, etc.) spread and wreaked havoc mostly in the airless, dark, damp, and dirty homes of the poor in the big cities.[93] Under these circumstances, district municipalities used to set their priorities by differentiating between property tax payers and non–tax payers. For example, the Beyoğlu Municipal Department, the richest municipality in Istanbul, was not able to rehabilitate the Kasımpaşa stream, around which the first poor working class district of Istanbul was concentrated.[94] Thus, in the process of modernization, ordinary people on the streets bore the brunt of urban dislocations (garbage, clean water, problems related to epidemics).[95]

Although epidemics occurred in different parts of the city, these regions were similar in some ways. Istanbul had a topography of hills and valleys, and the wealthy generally preferred higher ground. Traditionally, non–Muslims were more susceptible to epidemics because they tended to live in low–lying areas. According to the statistics, the outbreaks were

91 Özdiş, "19. Yüzyıl Mizah Basınında İstanbul'da 'Şehirli Olmak,'" 12–13.

92 Tekeli, "Tanzimattan Cumhuriyet'e Kentsel Dönüşüm," 878–882.

93 Nuran Yıldırım, "Su ile Gelen Ölüm: Kolera ve İstanbul Suları," *Toplumsal Tarih* no. 145 (2006): 2.

94 Özdiş, "19. Yüzyıl Mizah Basınında 'İstanbul'da Şehirli Olmak,'" 26.

95 Ibid., 27

more frequent in the neighborhoods settled at lower altitudes (such as Hasköy, Fındıklı, Balat, Arınavutköy, etc.), which were more in contact with sewage due to inadequate infrastructure.[96] In addition, the epidemics caused a further dispersion of the city, which already had a disorganized settlement. During the epidemics, there was typically an immigration movement from the densely populated neighborhoods (such as Beyoğlu, Kasımpaşa, Tatavla, Kuzguncuk, Tarabya, etc.) to the settlements around the city, such as the villages on the shores of the Bosporus, the islands, Makriköy, Ayastefanos, the Anatolian coast, most of which were already used as summer residences. A significant number of temporary urban immigrants to these quieter and safer neighborhoods consisted of the city's elite. A striking example is that cholera, which was known to affect both the upper and lower classes during the 1847–1848 epidemic, had little effect on the wealthy, as opposed to the lower and middle classes, during the 1893–1895 epidemic. As a result of government and expert investigations during the 1893–1895 cholera outbreak, the city was reorganized by excluding certain "usual suspects" from the urban space. Places where poor immigrants lived in unsanitary conditions, such as slums, provided ideal conditions for the spread of disease. For this reason, the government pursued a policy of moving some of the immigrants to the periphery of the city.[97] Between Sirkeci and Yedikule, there were shacks made of makeshift materials where refugees lived.[98] At the beginning of the epidemic, suitable land for these immigrants was sought outside the city center. In addition, unemployed bachelors, who were considered problematic in terms of public order and hygiene, were to be transferred to other provinces. Meanwhile, slaughterhouses, marketplaces, market gardens, stables, cemeteries, and some production sites such as tanneries (debbağhane), lime kilns (kireçhane), and others were also to be relocated to the periphery of the city.

96 The 1911 health statistics. See. Gümüş, "Alt Yapıları Görünür Kılmak: Geç Osmanlı İstanbulu'nda Tifo, Kolera ve Toplumsal Eşitsizlikler," 135.

97 Mesut Ayar, *Osmanlı Devletinde Kolera: İstanbul Örneği (1892–1895)* (İstanbul: Kitabevi Yayınları, 2007), 336–337.

98 Ibid., 338–340.

The policy of removing the cemeteries from the city had two aspects: first, to create new urban transformation and rental areas by emptying these areas, and second, to sanitize these areas that threatened public health as part of the fight against epidemics. The cemeteries were surrounded by long and high walls from 1853, and with the cholera epidemic of 1865, burials in cemeteries in central areas (such as Taksim and its surroundings) were banned.[99] According to modern hygiene regulations, burial of the dead was prohibited without the permission of both a doctor and an imam. In addition, some cemeteries were moved out of the city, while those that remained within the city were only allowed if they were surrounded by high walls.[100] The fate of the cemeteries was partly similar to that of the agricultural areas of the city. Since their complete removal was a long and costly task, it was decided to isolate them by other methods. The policy of enclosing market gardens with walls, which was to become effective in the following years (especially in the 1930s), had already been implemented for cemeteries in the mid–nineteenth–century. Similarly, the issue of moving stables, fruit and vegetable markets, and slaughterhouses out of the city had occupied public opinion for many years.

§ 4.8 Urban Sanitation and Epidemic Diseases

At the end of the nineteenth–century, the discovery that diseases such as typhoid and cholera spread through water brought urban concerns to the forefront of the global agenda, emphasizing the provision of clean water and the proper disposal of wastewater, as inadequate sewerage systems allowed human waste to contaminate drinking water and trigger outbreaks.[101] In major European cities, streets were widened, sewer systems

99 Saro Dadyan, "Şehrin En Büyük Mezarlığından, En Önemli Merkezine: Salgın Hastalıkların İzinde Taksim ve Çevresi," in *Osmanlı'dan Cumhuriyet'e Salgın Hastalıklar ve Kamu Sağlığı*, ed. Burcu Kurt and İsmail Yaşayanlar (İstanbul: Tarih Vakfı Yurt Yayınları, 2017), 89.

100 Fatih Tetik, *Osmanlı Devletinde Tanzimat Dönemi Kamu Sağlığı Politikası (1839–1876)* (Master's Thesis, Marmara Üniversitesi, 2007), 26.

101 Yıldırım, "Su ile Gelen Ölüm: Kolera ve İstanbul Suları," 3–4.

were improved, and a clearer distinction was made between clean and dirty water. Garbage was collected under more hygienic conditions, while cemeteries, public markets, slaughterhouses, and industrial plants were moved out of the city.

At the same time, one of the main expectations of the Ottoman government from modern municipalities and science was the rapid prevention and treatment of epidemics. This was not only a matter of "prestige" but also a responsibility to serve the "people". In Ottoman Istanbul, however, budgetary constraints prevented the kind of extensive interventions in urban space (such as demolishing buildings, widening streets, constructing sewerage systems, etc.) seen in European examples. Instead, the government tried to solve the problem with low–cost measures instead of long–term and costly applications. By assuming a supervisory role, the government became more involved in the daily lives of citizens, including improving environmental sanitation, regulating water use, and monitoring food consumption.[102] In addition, urban dwellers, especially

102 Ensuring cleanliness on streets and fairgrounds; Prohibiting the public from using streets and gardens as toilets; Prohibiting the disposal of human feces in running water or using them as manure; Prohibiting the entry into dirty toilets, stepping in human filth, or entering houses with shoes on; The prohibition of allowing animals like cats and dogs into the house; Preventing overcrowding in workers' and poor neighborhoods, barracks, prisons, and schools; Paying attention to inspecting crowded places such as inns, bachelor rooms, workshops, factories, and public and private latrines; Paying attention to inspecting crowded places such as inns, bachelor rooms, workshops, factories, and public toilets; Ensuring that household rubbish is placed in a closed container and that a strong antiseptic is poured over it twice a day; Removing manure and rubbish heaps only after they have been watered with strong antiseptics; Covering the inside of the garbage carts with zinc and making sure that the carts have lids; Prohibiting the burial of the dead inside settlements and in household gardens; The relocation of cemetery areas outside the city for the hygiene of waters; Prohibiting the irrigation of gardens with sewage, closing open sewers, and prohibiting the consumption of water from wells close to sewers; Paying attention to the infiltration of dirty water into the wells; Paying attention and taking care to ensure the purity (by boiling) of the water for drinking; Not using water from wells that may be in contact with dirty water, and closing these wells if necessary; Using the water from such wells should never be done, especially in the production of bread; Not washing clothes in running water, not dumping

in newly built neighborhoods, had to bear the cost of infrastructure investments and construct the sewer system for their homes themselves.[103]

Epidemics placed an additional burden on the state budget, adversely affecting finances and creating tensions between the central and local administrations. For example, during the cholera epidemics of 1893–1895, the high expenditures led to friction between the Grand Vizierate and the Municipality. While the Municipality claimed that it was not possible to deal with the diseases with the existing resources, the Grand Vizierate claimed that the facilities available to the Municipality were sufficient and that there was no need for an additional budget. In this debate, Sultan Abdülhamid II sided with the Municipality and the requested funds were granted.[104] The fact that infrastructure investment requires a significant budget led to disagreements between the local government and the central government about priorities. While the city government emphasized that the first priority for preventing epidemics was to carry out extensive infrastructure work throughout the city, the central government's 1894 budget was insufficient to cover this amount. As a result, the central government increased the municipality's share of the property tax to finance the increased infrastructure activities.[105]

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feces; Regularly controlling the production of food and beverages according to hygiene standards; Prohibiting the washing of vegetables and fruits eaten uncooked and unpeeled with dirty water, and storing them in dirty containers; Moving the slaughterhouse, vegetable and fruit market, and stables out of the city; Ensuring the cleaning of stables and avoiding overcrowding by limiting the number of animals in stables; Establishing health centers outside the city walls; Avoiding the consumption of raw fruits and vegetables (especially those produced in summer, which are prone to picking up diseases in summer) and foods that are likely to come into contact with dirty water (such as cucumbers, melons, watermelon, oysters, mussels, mushrooms, beans, yogurt, etc.); Inspecting producers and sellers to prevent the sale of tainted food. See. Yıldırım, "Su İle Gelen Ölüm: Kolera ve İstanbul Suları," 2–11; İbrahim Aykun and Menekşe Yıldız Uslu, "Talimatnameler Işığında XIX. Yüzyılda Tifo Salgınından Korunma Yolları ve Aşı Uygulaması," *ASSAM International Refereed Journal* 9, no. 20 (2022): 19–34.

103 Tetik, *Osmanlı Devletinde Tanzimat Dönemi Kamu Sağlığı Politikası*, 23–27, 58.

104 Ayar, *Osmanlı Devletinde Kolera: İstanbul Örneği*, 238–239.

105 The share of property tax allocated to the municipality has been increased from 15% to 30%. See. Ayar, Osmanlı Devletinde Kolera, İstanbul Örneği, 237.

The areas where wealthy people lived (Nişantaşı, Çengelköy, Bebek, Tarabya, etc.) were at the forefront of infrastructure investments.[106] It can be assumed that the fact that more property tax was collected from these neighborhoods was effective. In addition, it was likely that this group, which represented the upper class of society, would be able to communicate their demands more quickly to the rulers to meet their needs. The waterborne epidemics (such as typhus, cholera, etc.) usually occurred in densely populated areas. The streams in these areas had become the sewers of the city.[107] Many stream beds were surrounded by gardens that grew vegetables and fruit for the city. The disease spread through the use of water contaminated with human waste in homes and vegetable and fruit gardens. The water was used to irrigate gardens that grew raw foods such as vegetables and fruits were cultivated, using human feces as fertilizer. This practice led to the spread of disease, as the crops grown under these conditions became carriers of harmful pathogens.[108] Soon, the use of sewage and human feces in agriculture was recognized by the authorities as a major health hazard contributing to epidemics.[109] In this view, wastewater and water for everyday use had to be

106 Gümüş, "Altyapıları Görünür Kılmak," 135–137.

107 Ayar, *Osmanlı Devletinde Kolera, İstanbul Örneği*, 361.

108 Ekrem Kadri Unat, *Bulaşıcı Hastalıklarla Savaş ve İslam Dini* (İstanbul: İstanbul İlim Yayma Cemiyeti Neşriyatı, 1975), 15; "İsmail Yaşayanlar, Osmanlı Devletinde Kamu Sağlığının Kurumsallaşmasında Koleranın Etkisi," 19.

109 As a matter of fact, the urban hygiene issues caused by Istanbul's streams dated back to earlier centuries but the scale of threat and reasoning of authorities differed considerably. In the past, despite all prohibitions, urban agricultural areas had been opened to construction. Buildings were being raised around the streams in the city. At different times, Sultan's edicts were issued to prevent such uncontrolled growth of the city. For instance, Sultan Selim II, in his edict dated 11 Ra 975 (1567), forbade the construction of vineyards, orchards, market gardens, and houses around the Kağıthane and Kırkçesme streams and the waterways leading to building complexes (*imarethane*) and mosques, unless a distance of three *zira* was maintained. He ordered the removal of existing agricultural fields and houses closer than three *zira* to the streams. The inadequacy of the law (Sultan's decrees in this case) in solving the current situation was evident from another decree issued in the 17th century on the prohibition of planting trees and making

strictly separated. The municipality planned to conduct regular inspections of wells and latrine pits in produce and private homes. Expert reports showed that during the cholera outbreaks of 1893–1895, the Kasımpaşa stream and its surroundings, as well as the streets of Hasköy, Balat and Ayvansaray, were extremely unhealthy and required urgent intervention. These reports noted that the Kasımpaşa stream had become a swamp covered with animal dung and garbage and that, as in the other areas mentioned, there was no adequate sewage system. The reports also outlined measures to be taken, including proper construction of sewers, regular garbage collection, keeping the streets clean, demolishing unhygienic buildings, establishing slaughterhouses in accordance with health standards, and creating marketplaces specifically for the sale of vegetables and fruits.[110]

Most of the proposed measures could not be implemented. Nevertheless, the outbreaks led to a number of innovations in urban hygiene and public health, resulting in the establishment of modern institutions such as the Imperial Bacteriology Laboratory (Bakteriyolojihane–i Şahane) and disinfection stations (*tebhirhane*). Various medical statistics were kept and water analyses were carried out. Above all, the epidemic drew the attention of the administrators to the water and sewage systems of

gardens on the streams and waterways in the same region. This edict was prepared based on the report of Hasan, the minister responsible for managing water channels (*subaşı*). According to this report, houses were built, market gardens were planted, trees were cultivated, wells were dug, and latrines were excavated along the Kağıthane and Kırkçeşme streams and other waterways. In addition, human feces from these latrines, known as *sirka*, were used to irrigate the gardens. The inhabitants of these areas did not allow the officials responsible for managing water channels (*suyolcu*) to inspect these areas, claiming that they were their "private property". The example demonstrates that from the 16th century onwards, the streams and waterways on the periphery of Istanbul started to be developed for agricultural activities. See. Ahmet Refik Altınay, *Hicri 11. Asırda İstanbul Hayatı* (İstanbul: Devlet Matbaası, 1931), 50–51.; Ahmet Refik Altınay, *On Altıncı Asırda İstanbul Hayatı* (İstanbul: Devlet Basımevi, 1935), 17, 28.

110 Ayar, *Osmanlı Devletinde Kolera: İstanbul Örneği*, 260–261.

the settlements.[111] As a result of the investigation, it was found that the villages near the water sources were polluting some of the water sources through various means such as washing clothes and throwing garbage. Therefore, it was decided to expropriate the villages near the water sources and move the villagers and immigrants living there to other areas.[112]

§ 4.9 Concluding Remarks

This chapter showed the emergence of the urban boundary problem during a period of transition for Istanbul in the last quarter of the nineteenth–century. Through different perspectives and examples, the chapter identified three aspects of this spatial transition, namely (1) a top–down effort that failed to take hold in a context of administrative confusion, (2) a bottom–up process shaped by competing interests and methods, revealing numerous contradictions between different actors using different strategies, and (3) a legal basis inscribed in official maps. Exemplary cases from the period prove that erecting buildings, vineyards or orchards was one of the old and "semi–legal" ways of claiming rights to state land. This was semi–legal, as the law required special permission to plant vineyards or orchards on state land without permission. The government, on the other hand, was able to clear illegally planted vineyards and orchards on state land only before they begin to bear fruit. This opened a space of opportunity to be exploited by different actors at different levels. Such acts of exploitation was not limited to the subjects, and although seeming to be quite contradictory, state institutions too were involved. While the municipality, faced with budgetary constraints, sought to limit its jurisdiction by defining its boundaries, the State Council tended to tolerate urban growth in order to increase state revenues. Another such case was the contradiction between two articles of the 1882

111 Nuran Yıldırım, "Kolera Salgınlarında Şehir Hijyeni: İstanbul'da Kanalizasyonlar, Su Şebekesi ve Tebhirhaneler," *Apredamento Mimarlık* 342 (2020): 87.; Yıldırım, "Su ile Gelen Ölüm: Kolera ve İstanbul Suları," 10.

112 Ayar, *Osmanlı Devletinde Kolera: İstanbul Örneği (1892–1895)*, 347–352.

law on the construction of market gardens, which created legal loopholes that were exploited by various garden owners.

Each chapter of this dissertation examines the urban–rural relationship and the question of urban boundary through different conceptual lenses and scales. Focusing on the late Ottoman period, Chapters 3 and 4 revealed and analyzed the spatial effects of urban growth to land use and agricultural system in Istanbul, while examining the administrative and legal efforts to control it. In examining these effects, the dissertation also discussed how agricultural elements such as market gardens, vineyards, and orchards became both active and passive agents of urban land development and transformation.

The following two chapters (chapters 5 and 6) shift the focus to the early republican period and examine the transformation of Istanbul's agricultural system from a different angle. The 1930s come to the fore as a post–World War I period in which the young republic sought to revitalize and rebuild the city after dramatic social and economic ruptures. In this period, the urban–rural relationship and the question of the urban boundary took a turn as the maintenance of the local fresh food system came to the fore in conditions where the spatial and temporal scales of the supply chain extended to distant cities. This period also differed from previous decades in the widening gap between the elements and activities that had long constituted Istanbul's metabolism.

5

Struggles of Change: Fresh Food Production, Distribution, and Consumption During the 1930s

This chapter focuses on the 1930s, after World War I, and assesses the potential of Istanbul's agricultural and food system[1] before it underwent a major transformation.[2] In addition to Istanbul's agricultural potential, It investigates the high cost of living in relation to fresh food production and distribution, as well as the vegetable market and porters. In addition, it continues to address many of the issues identified in previous chapters, most of which stem from the city's fragmented topography and inadequate municipal budget. Crucially, however, this chapter argues that these transport technologies and related policies enabled the city to transcend its physical boundaries and connect with other productive regions at the scale of the nation–state by reshaping urban–rural relations.

1 The food system refers to actors and processes of the production, distribution and consumption of food.

2 See Chapter 6.

§ 5.1 An Abandoned City

The population of the Ottoman capital, which entered the First World War with more than a million inhabitants, was almost halved after its aftermath. According to the first census after the war (1927), the area of Istanbul province was 5,482 square kilometers, with a population of 806,863 and a population density of 147, which was quite high compared to Turkey's population density of 18.[3] The population of the municipality was 699,869, which included the walled city as well as the districts of Adalar, Bakırköy, Beyoğlu and Üsküdar. (Table 5.1; Table 5.2). According to the 1927 and 1935 censuses, only a quarter of Turkey's population lived in cities. Despite all its losses, Istanbul remained the country's most populous city. (Table 5.3; Table 5.4).

Table 5.1 Istanbul's municipal population

Location	Men	Women	Total
The Walled City	139,023	122,481	261,504
Beyoğlu	141,450	145,520	286,970
Üsküdar	61,255	63,300	124,555
Bakırköy	7.054	8,095	15,149
Adalar	5,231	6,460	11,691
Total	354,013	345,856	699,869

SOURCE 28 Teşrin–i Evvel 1927 Umumi Nüfus Tahriri, 1928.

3 Over the years, the population of Istanbul province changed as follows 1927 (806.863), 1935 (883,599), 1940 (991,237), 1945 (1,078,399), 1950 (1,166,477).

Table 5.2 Istanbul's provincial population

Location	Man	Women	Total	Pop. density	Land area
The Walled City	139,023	122,481	261,504	1038	535
Üsküdar	76,923	78,169	155,092	143	1090
Adalar	5,231	6,460	11,691	974	12
Beyoğlu	145,525	148,500	294,025	?	?
Bakırköy	9,892	10,549	20,441	70	290
Şile	6,326	7,169	13,495	13	1030
Çatalca	26,686	23,929	50,615	20	2525
Total	409,606	397,257	806,863	147	5,482

SOURCE 28 Teşrin–i Evvel 1927 Umumi Nüfus Tahriri, 1928.

Table 5.3 The population of Turkey according to the census of 1927

Population	Number	Percent %
Urban	3 305 879	24,22
Rural	10 342 391	75,78
Total	13 648 270	100

SOURCE: Tarım İstatistikleri, 1928–1936.

Table 5.4 The population of Turkey according to the census of 1935

Population	Number	Percent %
Urban	3 799 742	23,46
Rural	12 400 952	76,54
Total	16 200 694	100

SOURCE: Tarım İstatistikleri, 1928–1936.

What remained after the periods of war, occupation, and population exchange was a former capital stripped of its past and dethroned. The city's boundaries, stretching from Bostancı to Küçükçekmece, hung loosely like an oversized garment slipping from its shoulders. This presented a fragmented scene, with the sparse population clustered in a few areas while the rest remained almost deserted. The city, having endured World War I and occupation, appeared desolate in the 1930s:

> Devastated by the destructive fires, the city lost its former hinterland and the honor of being the seat of government. It now consists of vast fire districts, clusters of dilapidated tin settlements, and scattered built-up areas within very expansive borders.[4]

Some parts of the city (especially the villages on the Bosporus coast) had lost their former vitality due to a lack of demand. Life in these areas suddenly diminished. This was due to inadequate urban facilities (schools, hospitals, etc.) and transportation infrastructure (ferry services, etc.), as well as limited and expensive food.[5]

Transportation was undoubtedly one of the most important factors in the city's growth patterns. During this period, urban dwellers preferred the Anatolian coastline (Suadiye, Bostancı, etc.), which had more transportation options (suburban trains, trams, ferries, etc.), rather than the Bosporus.[6] However, even those areas with relatively better transportation infrastructure are poorly integrated into the city center.

> Kadıköy, Üsküdar, Çamlıca, Suadiye, Kartal, Pendik are neighborhoods of Istanbul and they should be so. But they are such neighborhoods that in order to go there, you will have to change more means of transportation than a trip to the Far East.[7]

As a result of the wars and population exchanges, Istanbul had not only lost its population but also its position as a hub for trade with the Balkan states and the Mediterranean basin. The countries of the region, which had previously conducted their trade through the port of Istanbul, had begun to manage it directly with their own resources.[8] The main reason for this was that Istanbul was no longer the center of the state, becoming a second–class metropolis within the Republic of Turkey, after the capital, Ankara.

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4 "İstanbul'un İmarı," *Cumhuriyet*, November 13, 1931, 3.

5 Suat Derviş, *Çöken İstanbul: Röportajlar*, (İstanbul: İthaki Yayınları, 2021), 187–189.

6 Ibid., 196–199.

7 Akşamcı "Şehir Civarında Gezintiler," *Akşam Gazetesi*, 16 April 1935, 3.

8 Muhlis Ethem, "İstanbul'da Arsa Spekülasyonu ve Mesken İnşaatı," *İstanbul Belediye Mecmuası*, no. 103 (1933): 761.

Ankara had become the center of administrative, business, and cultural life (including universities). Istanbul, on the other hand, gradually began to lose its position to Ankara with the establishment of the Republic after the long wars. According to the famous writer and journalist Suat Derviş, as the years passed, if the city was not reconstructed, this decline would become more evident, and Istanbul would turn into a provincial city.[9] At present, Istanbul had the appearance of a "large village."[10]

> Istanbul is a large city made up of separate villages. Some parts of the city that are far from what we would consider the city center exist in the tranquility and seclusion of a small town. They come to Istanbul as if they were "descending into the city".[11]

The two main reasons for this situation were the city's loss of half of its population and the insufficient municipal budget. Additionally, the rudimentary transportation infrastructure was inadequate for integrating a city with a fragmented topography like Istanbul. Even cities with smaller populations than Istanbul, such as Pest and Vienna, had larger budgets than Istanbul. The municipality was struggling to provide infrastructure and services to all parts of the city, which was expanding uncontrollably and becoming increasingly disorganized. According to Akşamcı,[12] a columnist for the daily Akşam, there were two ways to address this situation: increase the city's income by a few percent or reduce the city's boundaries significantly.[13]

To modernize Istanbul, which was almost 8–10 times larger than Vienna, the first solution that came to mind was to reduce the municipal boundaries. However, according to Hafız Raif Bey, who had served as Deputy City Administrator for a long time, this was not an easy task. The

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9 Derviş, *Çöken İstanbul: Röportajlar*.

10 Vâlâ Nurettin, "İstanbul'da Bir Köycülük Siyaseti," *Akşam*, June 11, 1938, 3.

11 Akşamcı, "İstanbul'un Nüfusu," *Akşam Gazetesi*, October 26, 1935, 3.

12 Between 1933 and 1936, Hüseyin Cahit Yalçın used the pen name Akşamcı. Vala Nurettin had used it before and after these years. See. Burak Yenituna, "1930lar Türkiyesi'nde Bir Modernleşme Aracı: Basın" (PhD diss., İstanbul Üniversitesi, 2013), 122.

13 Akşamcı, "Şehri, Şehirli Yapar," *Akşam*, February 14, 1937, 3.

surrounding districts were more developed and wealthier than the center of Istanbul. To what extent would it be right to exclude or neglect these well–developed and prosperous areas because of this "downsizing surgery"? Istanbul was a city composed of three main regions that were inseparable from one another.[14] The city's fragmented structure made its modernization difficult.

Some viewed Istanbul's lack of development as a matter of mentality and associated it with the style of urban management. According to Vâlâ Nurettin, Istanbul formed an enormous unity, yet it was composed of districts and large settlement units that were indistinguishable from Anatolian towns. He suggested that there should have been two types of municipalities in Istanbul: one centralized and one completely decentralized. While one would handle the city's general infrastructure, road network, and squares, the other would manage purely local affairs. In this way, the neglected districts of Istanbul, even if as poor as the towns of the poorest eastern provinces, would have their own small municipality.[15]

According to the 1934 census, Istanbul had a total of fifteen districts, ten within the city limits and five outside. There was a neighborhood organization inside the city and a village administration outside. Many districts had both neighborhoods within the municipal boundaries and villages outside of them.[16] (Table 5.5)

14 "İstanbul Şehrinin Islahı: Sabık Şehremaneti Muavinlerinden Raif Bey'in Fikirleri," *Cumhuriyet*, November 16, 1929, 2.

15 Vâlâ Nurettin, "İstanbul'un Metruk Semtlerinde Belediyecilik," *Akşam*, July 15, 1938, 3.

16 Osman Nuri (Ergin), "Dünkü ve Bugünkü İstanbul", *İstanbul Belediye Mecmuası*, no. 115–117 (1934): 367–368.

Table 5.5 The number and area of districts, sub-districts and villages

District center	Sub-district (in the municipality)	Sub-district (outside the municipality)	Neighborhood	Village	Area (municipal) (km^2)
Eminönü	5	0	45	0	4,45
Fatih	6	0	93	2	29,70
Bakırköy	2	1	9	17	27,30
Beyoğlu	6	0	53	1	18,65
Beşiktaş	2	0	14	0	12,60
Sarıyer	2	1	11	6	52,40
Beykoz	2	1	6	20	32,95
Üsküdar	3	0	42	4	34,90
Kadıköy	3	0	17	0	29,25
Adalar	3	0	9	0	10,80
Kartal	0	2	0	20	-
Şile	0	4	0	89	-
Silivri	0	2	0	15	-
Çatalca	0	4	0	44	-
Yalova	0	3	0	24	-
Total	34	18	289	252	253,000

SOURCE Şehremaneti Mecmuası (1934).

In order to fully implement the zoning plan of the large and dispersed city, large amount of funds was needed. In the face of an insufficient budget, the dominant idea was to prioritize the zoning of the busiest, most dense areas of the city. In this way, other areas could be reconstructed with the revenues that the zoning plan would bring to the city.[17] According to Cemil Topuzlu, former mayor of the city, the main reasons for Istanbul's neglect were the lack of a zoning plan (due to fragmented topography, etc.), inadequate budget planning (over–employment of civil servants, etc.), and insufficient tax collection (the municipality received very little from taxes on gas, electricity, etc.). He suggested that 40 to 50

17 "İstanbul'u İmar: İptida En Kalabalık Yerlerden İşe Başlanacak," *Akşam*, October 28, 1935, 3.

years would be needed for the city's development with the existing municipal budget. According to this plan, the city harbor was to be relocated to a new area between Yenikapı and Yedikule within the first 10 years, where new facilities would be built. The central train terminal in Sirkeci (European side) and coal depots along the Bosporus shoreline would also be moved to the new hub. At this phase, the coastline between Unkapanı and the new harbor, as well as the coastline between Galata and Dolmabahçe on the opposite side, would also have to be reconstructed, while reestablishing the industries along the Golden Horn to a prospective industrial zone outside the city. In the second 10 years, the inner walled area of Istanbul would require development. In the last 20 years, the city's periphery—namely the Bosporus, Kadıköy, Üsküdar, Bakırköy, the Islands, and then Şişli and its surroundings on the European side—would need to be developed. According to Topuzlu, constructing a new port was essential. Additionally, a zoning commission to be established under the leadership of Prime Minister İsmet İnönü was expected to create a separate budget for Istanbul's development through land sales, etc.[18]

İsmet İnönü, on the other hand, believed that Istanbul should be restored without expanding beyond the city's borders. The city's old features should be preserved, and new works should be created. In this way, modern urbanism would not be neglected, and the historical aspects of the city would become more visible. İnönü did not believe it was appropriate to create new settlements outside Istanbul's municipal boundaries. According to him, this would merely unnecessarily expand the municipal boundaries and lead the municipality to incur excessive expenses. Unlike Cemil Topuzlu, İnönü was not in favor of relocating Istanbul's port between Yedikule and Yenikapı. This project suited not the city as it was at the time but rather the vision of a greater Istanbul in the future. For him, the immediate focus of Istanbul's development was the organization

18 "Yarınki İstanbul: Eski Şehremini Operatör Cemil'in Bu Adlı Kitabı Çıktı, İstanbul'un 50 Sene İçinde Nasıl İmar Edilebileceğini İzah Ediyor," *Akşam*, April 26, 1937, 5; Salih Alaçam, "İstanbulumuzun İmarı Hakkında Ne Diyorlar: Operatör General Cemil Diyor Ki: 'İmar İşine Bir Yerden Kül Halinde Başlamalıdır," *İstanbul Belediye Mecmuası*, no. 185 (1940): 185–186.

of its interior.[19] For this, a decision had to be made regarding the prospects of Istanbul and the methods to reach there.

§ 5.2 Thinking Istanbul as An Agricultural City

In the early years of the Republic, one of the most pressing issues was what the nature of Istanbul was, or should be. Should Istanbul be a city of commerce, industry, tourism, and entertainment, or should it be a city where all of these activities were located in different regions? Far from final judgment, the municipal government's position was closer to a new zoning plan where different foci of activity between districts were underscored. According to Süreyya Pasha, Honorary Counselor of the Municipality, the city could be roughly zoned as follows: inner–walled Istanbul, Eminönü, and Galata for commerce; the Golden Horn and the Marmara coastal area of the outer city walls for industry; Beyoğlu for entertainment; inner–walled Istanbul for cultural tourism; and the Bosporus and the vicinity of Üsküdar for the countryside.[20]

In the 1930s, Istanbul was a city that had not yet found its direction. It had the opportunity to develop its potential as both an industrial and agricultural city, thanks to its transport infrastructure, water resources and climatic conditions. According to the official publication of the Istanbul Municipality, Turkey's trade and industry showed its greatest development and progress in this city. The abolition of capitulation, the implementation of the protectionist customs system, the enactment of the Industrial Promotion Law (Teşviki Sanayi Kanunu, 1927) and similar measures had opened up a wide space for the development of industry. In the early 1930s, the industry was still in its infancy. There were only 563 private factories and workshops of various sizes and types.[21] (Table 5.6).

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19 Salih Alaçam, "Cumhuriyet Halk Partisi Başkanının İstanbul'un İmarı Hakkındaki Fikirleri," *İstanbul Belediye Mecmuası*, no. 187–188 (1941): 228–229.

20 Şehremaneti Fahri Müşaviri Süreyya, "Süreyya Paşa'nın Layihası," *İstanbul Şehremaneti Mecmuası*, no: 3 (1340/1924): 44.

21 Osman Nuri (Ergin), "Dünkü ve Bugünkü İstanbul", 359.

Table 5.6 Istanbul artisan associations and their membership, 1935

Factory WS	No	Factory WS	No	Factory WS	No.	Factory WS	No	Factory WS	No
Weaving	76	Soap-making	7	Car Repair Shops	4	Gramophone Records	2	Bells	2
Knitwear	68	Pasta	6	Brick-works	4	Glucose	2	Lime	2
Timber & Woodworking	52	Ceramics	6	Tinkering	4	Asphalt	2	Agricultural Tools	1
Textiles	43	Shoemaker's Supplies	6	Cold Storage	4	Tarps	2	Bakery?	1
Leather Tanning	33	Chocolate	6	Shoemaking	3	Scarfs	2	Rice Milling	1
Socks	31	Soda & Soft Drinks	6	Pharmacy	3	Blue Dyes	2	Copper Wire	1
Printing	24	Dyes	5	Enamel	3	Nets	2	Cotton Swabs	1
Sugar and Sweets	17	Combs	5	Cement	3	Carbon Acids	2	Mops	1
Bakery	16	Spirits	5	Font Foundries	3	Yarn	2	Hardware	1
Undergarments	11	Conned Food	5	Iron Foundries	3	Umbrellas	2	Gramophones	1
Perfumery	8	Biscuits	4	Carpet Weaving	3	Nails	2	Cables	1
Stationery Goods	8	Spools & Buttonholes	4	Galvanized Buckets	3	Dry Docks	2	Electrical Supplies	1
Copperworking	7	Hats	4	Lead Pipes	3	Glassworks	2	Cauldrons	1
Oil Pressing	7	Shoe Last Makers	4	Beds	2	Towels	2	Feather Filler	1
								Total	563

SOURCE İstanbul Belediye Mecmuası, (1934).

The city also had the potential to be an agricultural center, with numerous vineyards, orchards and market gardens. According to the calculations (1929), there were 685 gardens in the city.[22] Also, the horticulture specialist Hulki argued that the vegetable cultivation, which constituted one of the main and most important branches of agriculture in Istanbul and its surroundings, was expanding gradually. This was because those who had grown cereals and tobacco, mostly migrant farmers, began to grow more vegetables. According to Hulki, the number of market gardens in the city exceeds 1,200. However, there was no statistical data to indicate the equivalent of this number in terms of area. In addition, this figure does not include fields used for dry vegetable production. The importance given to vegetable cultivation, he posited, was proportional to the area allocated for this activity:

> The land allocated for vegetable cultivation in and around Istanbul along the Anatolian coast begins at Yalova, following Gebze to Tuzla, and then descends to Pendik, incorporating the Aydınlı stream area. From Pendik, it continues along the coast up to Anadolu Feneri. On the Rumeli coast, the area begins at Küçükçekmece, following the shoreline down to the port. At the same time, it encompasses the hinterland villages inhabited solely by migrants, such as Nifos, Litros, Avazköy, Kalfaköy, Arnavutköy, Boğazköy, Cebeciköy, Kemerburgaz, and Gümüşdere, extending along both shores of the Golden Horn up to Rumelifeneri.[23]

However, this increase in vegetable production has not been supported by a developed market. As a result, vegetable growing was no longer as profitable as it had been before the period of war (when the city's population was over a million). Hulki mentioned that in recent years, the existing canneries (five in total) have barely been able to cover the gap between production and consumption of vegetables. According to him, if

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22 Ali Suat, "Belediyeler Şehircilik Fenni," *İstanbul Şehremaneti Mecmuası*, no. 60 (1929): 399–402.

23 Hulki, "Sebzecilik," in *Birinci Ziraat Kongresi: İhtisas Raporları*, vol. 1 (Ankara: Milli İktisat ve Tasarruf Cemiyeti, 1931): 937.

these factories stopped buying vegetables for any reason, many gardeners would go bankrupt.[24]

Necati Şerif also identified the consumer market as the top priority for the organization of vegetable production. According to him, certain goods could become "necessities", depending on the conditions of the time. In many settlements in Anatolia (villages, towns and even cities) the production and consumption of vegetables was unknown. However, the economic benefits of these products could not be overlooked.[25]

The vegetable farming, as an urban occupation, was a type of agriculture specific to the outskirts of major cities like Istanbul, Izmir and Bursa, as well as coastal provinces.[26] According to agricultural statistics, in 1934 the area of vegetable and fruit gardens, olive groves, vineyards was 1.47% of the total area of Turkey.[27] (Table 5.7).

Table 5.7 The agricultural land classification of Turkey, 1934

Categories	Land Area (ha)	Percent %
Fields ploughed and planted each year	10,491,211	13,75
Meadows, plateaus, grazing lands and pastures	44,329,423	58,12
Market gardens, orchards, olive groves, vineyards, etc.	1,120,740	1,47
Forests	9,169,859	12.02
Non-crop land	11,162,367	14,64
	76,273,600	100%

SOURCE Tarım İstatistikleri, 1928–1936

In Turkey as a whole, among the vegetable, fruit, olive and wine–growing sectors, market gardening had the smallest area (0.18%). (Table 5.8).

24 Hulki, "Sebzecilik," 937–938.

25 Necati Şerif, "Sebzecilik," in *Birinci Ziraat Kongresi: İhtisas Raporları*, vol. 1 (Ankara: Milli İktisat ve Tasarruf Cemiyeti, 1931): 972–973.

26 Ege, "Türkiye Sebzeciliği," 930.

27 Başvekalet İstatistik Umum Müdürlüğü, Tarım İstatistikleri 1928–1936 (Ankara: Mehmet İhsan Matbaası, 1937).

Table 5.8 Proportion of market gardens, orchards, olive groves and vineyards in the general land classification of Turkey, 1934

Categories	Land Area (ha)	Percent %
Market gardens	142,552	0,18%
Orchards	285,903	0,37%
Vineyards	345,438	0,45%
Olive groves	346,532	0,45%
Flower gardens	315	-
	1,120,740	1,47%

SOURCE Tarım İstatistikleri, 1928–1936.

According to statistics, the agricultural land in Istanbul (339,008 ha) accounted for 0.44% of the total agricultural land in Turkey (76,273,600 ha). In Istanbul, pastures, meadows and plateaus made up the largest agricultural area in the city. This was followed by arable land, where crops such as cereals and fodder are grown regularly. Market gardens, orchards, olive groves and vineyards had the smallest area of urban agriculture in the city. Of these, market gardens accounted for 0.32% of the total agricultural area (1,113 ha). This rate was 0.18% nationally in Turkey. In the city, orchards accounted for 0.87% of the total agricultural area, with 2,979 hectares. This rate was 0.37% nationally in Turkey. In the city, vineyards accounted for 0.88% of the total agricultural area, with 3,000 hectares. This rate was 0.45% nationally in Turkey. In the city, olive groves accounted for 0.87% of the total agricultural area, with 2,979 hectares. This rate was 0.45% nationally in Turkey. Looking at the total, while in Turkey the share of land used for market gardens, orchards, olive groves and vineyards in other agricultural activities was 1.47%, in Istanbul this share was 2.94%. (Table 5.7; Table 5.9). In other words, Istanbul was much more productive than Turkey as a whole in terms of growing vegetables, fruit and wine.

Table 5.9 The agricultural land classification of Istanbul, 1934

City	Number (h)	Percent
The land that is ploughed and planted each year		
- Grains	14,576	4,29%
- Pastures and fodders	18,817	5,55%
- Fallow lands	21,134	6,23%
Meadows, plateaus, grazing lands, and pastures		
- Meadows	44,544	13,13%
- Plateaus and grazing lands	8,161	2,40%
- Pastures	221,705	65,39%
Market gardens, orchards, olive groves, vineyards		
- Market gardens	1,113	0,32%
- Orchards	2,979	0,87%
- Vineyards	3,000	0,88%
- Olive groves	2,979	0,87%
- Flower gardens	-	-
	339,008	100%

SOURCE Tarım İstatistikleri, 1928–1936.

According to the agricultural statistics (1934), activities such as vegetable, fruit, olive and wine growing in Istanbul were on a scale comparable to cities in coastal regions such as the Marmara, the Aegean and the Mediterranean, which had favorable conditions for such practices.[28] Comparing these regions, each of which specializes in either fruit, olive or vegetable production, the Aegean region ranks first with 322,398 ha, the Mediterranean region second with 146,456 ha and the Marmara region third with 117,400 ha.(Table 5.10, Table 5.11, Table 5.12). With its abundance of fruit and olive orchards (5,958 hectares) and vegetable gardens (1,113 hectares), Istanbul had surpassed many provinces in Turkey.[29] (Table 5.13, Table 5.14).

28 According to the agricultural statistics of 1928-1936, Turkey was divided into nine regions.

29 Birinci Köy ve Ziraat Kalkınma Kongresi (Ankara: TBMM Matbaası, 1938).

Table 5.10 Marmara region, vegetable, fruit and olive gardens

	Bursa	Edirne	Istanbul	Kırklareli	Kocaeli	Tekirdağ	Total (h)
Market gardens	2,713	0,626	1,113	1,132	1,673	1,730	7,430
Orchards	3,056	0,90	2,979	0,93	5,151	117	11,486
Vineyards	5,538	3,051	3,000	1,678	1,776	4,041	19,084
Olive groves	75,225	-	2,979	-	1,179	17	79,400
Flower gardens	-	-	-	-	-	-	-
Total (h)							117,400

SOURCE Tarım İstatistikleri, 1928–1936.

Table 5.11 Aegean Region, vegetable, fruit and olive groves

	Aydın	Balıkesir	Bur-dur	Çanak-kale	Denizli	İzmir	Isparta	Manisa	Muğla	Total (h)
Market gardens	1,516	2,863	1,323	1,808	2,230	1,000	1,655	2,770	2,550	17,715
Orchards	300	774	1,646	501	1,202	5,022	2,729	766	288	13,228
Vine-yards	506	2,904	1,230	3,333	10,280	20,939	2,602	26,776	1,144	69,714
Olive groves	27,369	46,120	20	26,438	24	47,922	-	7,159	66,374	221,426
Flower gardens	-	-	0,135	-	-	-	0,180	-	-	0,315
Total (h)										322,398

SOURCE Tarım İstatistikleri, 1928–1936.

Table 5.12 Mediterranean region, vegetable, fruit and olive groves.

	Antalya	Gaziantep	İçel	Maraş	Seyhan	Total (h)
Market gardens	3,896	2,375	1,850	2,242	4,138	14,501
Orchards	982	4,611	533	257	685	7,068
Vineyards	1,053	41,420	21,880	9,727	6,371	80,451
Olive groves	1,150	-	3,109	97	40,080	44,436
Flower gardens	-	-	-	-	-	-
Total (h)						146.456

SOURCE Tarım İstatistikleri, 1928–1936.

Table 5.13 The area of orchards and olive groves in the provinces in 1934

	City	Area (ha)		City	Area (ha)
1	Giresun	161,321	29	Elazığ	1,519
2	Bursa	78,281	30	Denizli	1,1226
3	Muğla	66,662	31	Niğde	1,134
4	İzmir	52,944	32	Mardin	1,026
5	Balıkesir	46,894	33	Yozgat	1,026
6	Seyhan	40,765	34	Van	823
7	Aydın	27,669	35	Malatya	727
8	Çanakkale	26,939	36	Çankırı	727
9	Erzurum	24,562	37	Kırşehir	702
10	Erzincan	13,221	38	Çorum	626
11	Manisa	8,585	39	Trabzon	470
12	Çoruh	6,620	40	Tokat	421
13	Kocaeli	6,330	41	Amasya	385
14	Istanbul	5,958	42	Maraş	354
15	Ankara	5,361	43	Sivas	350
16	Gaziantep	4,611	44	Afyonkarahisar	292
17	Samsun	4,570	45	Sivas	287
18	Kütahya	4,461	46	Eskişehir	263
19	İçel	3,642	47	Muş	258
20	Kayseri	3,191	48	Bolu	228
21	Kastamonu	3,156	49	Urfa	178
22	Isparta	2,729	50	Kars	175
23	Konya	2,333	51	Tekirdağı	134
24	Bilecik	2,235	52	Kırklareli	93
25	Antalya	2,132	53	Edirne	90
26	Diyarbakır	1,797	54	Siirt	90
27	Ordu	1,702	55	Gümüşhane	76
28	Burdur	1,666			
	Toplam				682,435

SOURCE Birinci Köy ve Ziraat Kalkınma Kongresi, 1938.

Table 5.14 The area of market gardens in the provinces in 1934

	City	Area (ha)		City	Area (ha)
1	Konya	9,798	29	Maraş	2,242
2	Erzurum	5,794	30	Muş	2,237
3	Ankara	5,785	31	Denizli	2,230
4	Sivas	5,348	32	Bolu	2,228
5	Malatya	4,253	33	Gümüşane	2,020
6	Seyhan	4,138	34	İçel	1,850
7	Antalya	3,896	35	Samsun	1,842
8	Van	3,500	36	Kırşehir	1,818
9	Kars	3,472	37	Çanakkale	1,808
10	Urfa	3,418	38	Çoruh	1,766
11	Niğde	3,061	39	Çankırı	1,733
12	Elazığ	3,035	40	Kırklareli	1,673
13	Kayseri	3,026	41	Isparta	1,655
14	Çorum	3,000	42	Zonguldak	1,598
15	Eskişehir	3,000	43	Aydın	1,516
16	Diyarbakır	2,975	44	Yozgat	1,500
17	Kastamonu	2,922	45	Burdur	1,323
18	Kütahya	2,883	46	Ordu	1,196
19	Balıkesir	2,863	47	İzmir	1,000
20	Siirt	2,861	48	İstanbul	1,113
21	Tokat	2,778	49	Amasya	1,110
22	Manisa	2,770	50	Giresun	973
23	Bursa	2,713	51	Bilecik	946
24	Ağrı	2,664	52	Trabzon	926
25	Erzincan	2,631	53	Edirne	621
26	Muğla	2,550	54	Afyon	291
27	G. Antep	2,375	55	Tekirdağ	173
28	Mardin	2,367			
	Total				142,552

SOURCE Birinci Köy ve Ziraat Kalkınma Kongresi, 1938.

As can be seen from the data in the tables above, the 1930s were years when Istanbul had the potential to be both an agricultural and an industrial city. In fact, it was perhaps a city with even greater potential in the agricultural sector. Some intellectuals of the time promoted such a vision on the grounds that this was imminent to the city's historical character:

> Some Anatolians refer to Istanbul as "big village", which is true. This situation has caught the attention of travelers for a long time. Istanbul seems to consist of many villages that have come together rather than being a city.[30]

The development of Istanbul was a matter that had both urban and rural dimensions. For this reason, it was also necessary to carry out rural activities in the city. One of the dominant sectors in the city was agriculture. In the early 1930s, there was a widespread belief that the development of urban agriculture and the need to derive greater benefits from it were necessary.

According to Abidin, the Director of Agricultural Enterprises at the Ministry of Finance, Istanbul was one of the regions in Turkey with advanced vegetable cultivation and significant potential for further development. The most important reasons for this were its mild climate, fertile soil, population density, and access to necessary materials and resources. However, even in these areas, vegetable cultivation remained quite simple and primitive. Many gardeners were unaware of seedling cultivation and the most profitable agricultural methods, such as early–season vegetable farming.[31]

According to A.O., a columnist for the Akşam newspaper, Istanbul was a city famous for the greatest variety of delicious vegetables in Turkey. Vegetables like artichokes and cauliflower were particularly well–suited to its climate. The market gardens surrounding the city also played a significant role in Istanbul's economy. The gardens not only met the city's own needs but also supplied vegetables to other provinces. However, due

30 Vâlâ Nurettin, "İstanbul'da Bir Köycülük Siyaseti," *Akşam*, June 11, 1938, 3.

31 Ege, "Turkiye'de Sebzeciliği," 930–936.

to neglect and disease, the city's vineyards and market gardens had lost their former prominence.[32]

Yunus Nadi, the chief columnist of Cumhuriyet newspaper, noted that despite having an agricultural tradition, the city did not sufficiently benefit from this potential and that there was no clear direction for this agricultural activity. All agricultural activities, including vegetable farming, were scattered and primitive. However, by taking advantage of Istanbul's geographical location, sectors such as poultry, vegetable and fruit production, and dairy farming could have been prioritized as they would yield quicker and greater profits. In fact, the grapes and eggs produced in Istanbul could be transported by refrigerated wagons to be consumed in London, Berlin, and Paris.[33] In this sense, developing urban agriculture in Istanbul and its hinterland was seen not only as a solution to the high cost of living but also as a contribution to national capital.

> Istanbul and its hinterland… What areas does this encompass? It includes a vast area of land, seas, rivers, and lakes stretching from Edirne to the Geyve Gorge and from Ereğli to the Dardanelles. Because its geographical location is favorable for trade, there is a significant amount of land available for agriculture, among other activities, in this area. In this region, vegetables, fruits, and flowers can be cultivated to an advanced degree.[34]

The development of urban agriculture was associated more with mentality than with potential. According to Ali Suat, a writer for the Istanbul Şehremaneti Mecmuası, European cities were sustaining themselves and making profits thanks to the green belts on their outskirts. Urban agriculture there was advanced; all lands were cultivated, and the yield was abundant. However, agricultural activities in Istanbul were quite 'primitive' compared to those in European cities. For instance, in summer

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32 A. O., "İstanbul Bahçıvanları Müşkül Vaziyette: Adana ve İzmir'den Gelen Turfanda Sebzelerle Rekabet Etmek Güçleşti," *Akşam*, June 15, 1936, 5.

33 Yunus Nadi, "İstanbul Havalisinin Ziraat Kabiliyeti," *Cumhuriyet*, April 4, 1933, 1.

34 Yunus Nadi, "İstanbul ve Hinterlandı Zirai Kalkınmanın Modeli Olabilir", *Cumhuriyet*, March 5, 1938, 1.

neighborhoods like Göztepe, barley was planted in empty fields and abandoned gardens, while many vineyards in Çamlıca were overgrown with weeds. In the farms deep within the Bosporus, nothing was being cultivated. The problem was not with the soil, water, or climate; the issue was a lack of knowledge about farming.[35] Seeing uncultivated, empty, abandoned, or primitive fields around Istanbul, which claimed to be one of the most important centers of civilization in the East, and witnessing gardens bearing wormy fruit and infested with pests was a disgrace and a sin.[36] However, there was a vast area in the city suitable for agricultural activity that could be cultivated, and it needed to be evaluated in the most economically efficient way.[37] It was observed with great astonishment and regret that even the fields in the nearest neighborhoods suitable for growing expensive crops (vegetables and fruits) such as Göztepe, Bostancı, and Beykoz were either empty or planted with barley.[38]

The agricultural land available to Istanbul was, certainly, insufficient for self–sustenance. For instance, it was not a considerable grain producer. Estimates indicated that Istanbul could only meet about 15% of its wheat needs for bread production through urban agriculture.[39] However, if Istanbul adopted scientific agricultural methods, it could opt for high–value crops (fruits and vegetables) for both domestic and foreign markets, potentially even exporting fresh produce and livestock to Europe.

35 Ali Suat, "İktisadiyatımız Etrafında," *İstanbul Belediye Mecmuası*, no. 79 (1931): 266–269.

36 Ali Suat, "Müstahsil İstanbul," *İstanbul Şehremaneti Mecmuası*, no: 63-64 (1929): 99-102.

37 This part of the text contains the calculations of Ali Suat.

38 Ali Suat, "Müstahsil İstanbul,"99-102.

39 In the entire province of Istanbul (including outlying farms and villages), more than 13 million kilos of wheat, more than 4 million kilos of barley, more than 2 million kilos of oats and more than 1.5 million kilos of maize were produced annually. In addition, more than 350,000 kilos of broad beans, nearly 300,000 kilos of beans and more than 400,000 kilos of onions were harvested. According to Ali Suat, who shared these figures, this production was totally inadequate in relation to the land and population. Just to meet the bread needs of Istanbul's population, 25 wagons - or 250,000 kilos - of wheat were needed every day. This amounted to 9,200 wagons or 100 million kilos per year. As this calculation shows, the production of cereals and pulses in the province was not sufficient to meet the needs of the city. Ali Suat, "İstanbul Şehrinin İhsai Mütalaası," İstanbul Şehremaneti Mecmuası, no: 54–55 (1929): 235–237.

Therefore, food sectors with higher income potential, such as viticulture, fruit and vegetable farming, canning, poultry farming, cheese and dairy production, and fishing, should be developed.[40]

Activities in agriculture could only meet the needs, were scientific methods applied.[41] The market gardens in the city a rather adequate number given the population of the city at the time. However, due to the use of primitive techniques, these gardens were not being utilized to their full potential.[42] It was estimated that a gardener, knowledgeable in the use of water and fertilizers, could have increased production severalfold. To achieve prosperity, it was argued, Istanbul should have effectively utilized its underperforming elements with modern methods, sufficient capital investment, proper organization and competent labor–power. All were scarce in the 1930s Istanbul.

The emphasis on the lack of labor–force and the under–utilization of the city's potential was so central that it was proposed in an article published at the İstanbul Şehremaneti Mecmuası that poor children in Istanbul could be sent to work on farms in the suburbs of the city, just like poor living in Paris. As a matter of fact, the competent labor question had been addressed some decades ago by the local administration of the time. In the prewar years, agricultural experts had proposed establishing an agricultural industry school that would focus on the main branches of this craft, such as dairy farming, cheesemaking, viticulture, vegetable gardening, fruit farming, floriculture, nursery farming, poultry farming, and beekeeping. In line with this proposal, the Emlak–ı Milliye began building an agricultural industry school in 1915 by purchasing the Paşa Mandıra and Arpacı farms in Beykoz. While efforts were being made to establish the school, warehouses had also been set up in each district center to equip farmers with new technologies and tools, as well as an instructor assigned to demonstrate their use. Additionally, various seeds and saplings

40 Ali Suat, "İktisat Programı Münasebetiyle," *İstanbul Şehremaneti Mecmuası*, no: 68 (1930), 267-272.

41 Ali Suat, "Belediyeler Şehircilik Fenni," *İstanbul Şehremaneti Mecmuası*, no. 60 (1929): 399–402.

42 Ali Suat, "İstanbul Şehrinin İhsai Mütalâası," 235–237.

had been distributed to villagers, and scientific agricultural methods were introduced. However, as in many other initiatives, World War I caused a significant pause in these efforts.[43]

The main reason for the dire need of competent labor was the decline in the number of farmers and gardeners in Istanbul during the post–war years. Most of these individuals, primarily Albanians, Slavs and Greeks, had emigrated to other countries due to decade–long wars and following population exchanges. In the 1932, there were around 60,000 tradesmen left in Istanbul. Not all of them had been organized into societies, nor were all tradesmen registered in the established societies. In 1932, there were 36 trade societies operating in Istanbul, comprising a total of 38,988 members. Among these, 1,007 were registered gardeners.[44] The table below demonstrates the society membership numbers.[45](Table 5.15).

43 Zühtü, "İdare–i Hususiye: Teşkilinden Belediye ile Tevhidine Kadar Neler Yaptı," *İstanbul Belediye Mecmuası*, no. 76 (1930): 129–139.

44 In a newspaper article from 1936, the number of gardeners in the city is given as 6 to 7 thousand. This may be because many gardeners were not registered with professional organizations. See. A. O., "İstanbul Bahçıvanları Müşkül Vaziyette: Adana ve İzmir'den Gelen Turfanda Sebzelerle Rekabet Etmek Güçleşti," *Akşam*, June 15, 1936, 5.

45 "Dahiliye Vekili Şükrü Kaya Beyefendi'nin Beyanatı," *İstanbul Belediye Mecmuası*, no. 115–117 (1934): 289.

Table 5.15 Istanbul artisan associations and their membership, 1932

No	Artisan Association	Number of Members	No	Artisan Association	Number of Members
1	Porters	5200	20	Bakers	845
2	Restaurant Owners	2884	21	Fabric sellers	814
3	Drivers	2672	22	Candy sellers	805
4	Bread makers	2141	23	Plasterers	801
5	Coffeehouse keepers	2075	24	Dock workers	758
6	Carters	2008	25	Carpenters	755
7	Grocers	2001	26	Bathhouse keepers	621
8	Barbers	1737	27	Alcohol Producers	500
9	Boatmen	1652	28	Musicians	350
10	Tailors	1219	29	Yogurt sellers	350
11	Milkmen	1195	30	Water sellers	314
12	Waiters	1091	31	Fishers	311
13	Builders	1052	32	Lightermen	203
14	Weavers	1033	33	Saddlers	201
15	Butchers	1011	34	Pavers	195
16	Gardeners	1007	35	Hotel owners	65
17	Shoemakers	913	36	Chickpea sellers	25
18	Wholesalers (vegetable and fruit)	694	37	Non–members	1494
19	Doorkeepers	656			
Total 38,988					

SOURCE İstanbul Belediye Mecmuası, no. 115–117, 1934, pp. 358.

To fill the gap created by the shortage of labor, food producers and distributors needed to adopt new methods to improve productivity such as pest and disease control, fertilizer use, and seed improvement while increasing the capital necessary for such investments. The need for capital stemmed from various operating costs, the most prominent of which was the procurement of fertilizers. If one considers the expense and difficulty involved in providing the necessary sheep manure for vegetable and fruit gardens and fields around the city, the significance of the situation becomes clearer. In market gardens, allowing the soil to rest was neither possible nor permissible. Most gardeners and farmers, unfamiliar with

the use of chemical fertilizers, were paying considerable amounts for animal manure. On the other hand, although waste materials (such as trash, vegetable scraps, etc.) could have been utilized, no such practice was common to the gardeners.

Ali Suat, much interested in the issue, promoted cost–efficient alternatives to circumvent capital deficiency. According to him, the main reason behind the underdevelopment was individuals' lack of know–how about cost–efficiency. It was essential for companies and producer cooperatives to undertake this task. He insisted on the establishment of new producer cooperatives to overcome the shortfall of capital, while encouraging the municipal government to provide incentives and assistance in this regard and to conduct initial economic assessments such as facility costs and profit margins. Ultimately, if the necessary information and capital were provided, the meadows, vegetable and fruit gardens, chicken coops, and beehives around Istanbul had the potential to nourish the great city and generate economic benefits.[46]

Another notorious obstacle to horticultural and viticultural activities in Istanbul was phylloxera disease, detrimental especially to vineyards.[47] The vineyards consisted of a characteristic element of the urban landscape until the pre–war years. However, the destructive effects of phylloxera, combined with the increased locust and fieldmice population resulting from the abandonment of fields by the former non–Muslim residents during war years, these vineyards dried up in a short time:

> One of the finest grapes in the world, the Çavuş grape was abundantly grown around Istanbul. From Bayrampaşa to Erenköy, Çamlıca, and Yakacık, the area was covered with vineyards. Today, almost no traces of these remain.[48]

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46 "Müstahsil İstanbul," *İstanbul Belediye Mecmuası*, no. 63–64 (1929): 99–102; Ali Suat, "İktisadiyatımız Hakkında," 266–269.

47 Osman Nuri Ergin, "İstanbul Belediyesi Hususi İdaresi On Senede Ne Yaptı?," *İstanbul Belediye Mecmuası*, no. 109–110 (1933): 111–113.

48 "Bağcılık Teşvik: Ziraat Müdürlüğü Köylüleri Teşvik Ediyor," *Akşam*, September 11, 1934, 5.

The Municipality and the Ministry of Agriculture were making considerable efforts to revive the vineyards in Istanbul. They were distributing American cuttings for free to those who requested them from the vine nursery in Erenköy. As a result, there was a growing interest in viticulture among the people of Istanbul. Particularly, new vineyards were beginning to emerge outside Topkapı and Edirnekapı towards the end of the decade.[49]

> Today, there are nearly fifty vineyards of various sizes around the city. All of these have turned into garden cafés. […] The average production of these vineyards is 10,000 kilograms.[50]

§ 5.3 Joy and Pleasure in Market gardens

Most urban spaces with multiple functions (such as inns, coffeehouses, gardens, etc.) transformed into single–function spaces with the modernization process. Vineyards, gardens, and market gardens, which served as production units related to the city and could perhaps be considered the vegetable-producing workshops of that time, also functioned as recreation and entertainment centers.

Many people from Istanbul would go to Yakacık, famous for its cherries, Çengelköy, known for its cucumbers, or the Langa gardens, as well as Mecidiyeköy, renowned for its mulberries, Yedikule, famous for its tasty lettuce, or the vineyards outside the city walls on their days off. Crowds disembarking from ferries, trains, trams, and buses would disperse to the mulberry orchards and cucumber gardens. Some would rent a mulberry tree for the day and settle underneath it with their families. Most people would bring their meals, gramophones, and the rakı they referred to as "imam suyu," and perhaps spend a few nights resting under the mulberry or grapevines. The gardeners were pleased because they

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49 Akşamcı, "İstanbul Civarında Bağlar," *Akşam*, September 21, 1935, 3.

50 Necmi Erkmen, "Üzümünü Başka Yerlerden Tedarik Eden Bağlar! İstanbul Bağlarında Neler Görülür? Bağlarda Üzüm Niçin Pahalı Satılıyor?," *Akşam*, September 14, 1938, 6.

could sell their produce without the trouble of going to the market.[51] (Figure 5.1). Excerpts from the period's press regarding the entertainments held in vineyards and gardens:

> For several weeks, it has been the season of lettuce. […] Trams are overflowing with people. There are no seats on the buses heading to Bakırköy […] On one side, trains are transporting passengers […] Even those arriving by car are present. […] From a distance, the creaking of the water wheel invites customers. This entertainment costs 5 piasters […] Lettuce causes the people of Istanbul to celebrate a sort of spring festival or harvest festival around Langa, Yedikule, and other gardens for several days each year. Public gatherings are formed here. However, not only around lettuce but also in the autumn around grapes, the same crowds can be seen. There are vineyards that the public loves. People spend the whole day eating, singing, and having fun. […] When there is an abundance of lettuce, grapes, and mulberries, the people of Istanbul gather in the places where these products are most plentiful, turning them into fairs. The municipality should establish parks for every type of fruit in every suitable district, starting with cherry orchards.[52]

> We are in front of the Langa gardens, which are famous for two things: cucumbers and the tavern keeper Maksud. When the season arrives, especially if it's a Friday or Sunday, the gardens become a bustling hub. The gardeners carry clay pots of salt and water on their backs, laying out mats for the customers and piling up heaps of cucumbers in front of them. Everyone rolls up their sleeves and enjoys eating heartily.[53] (Figure 5.2).

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51 A. Cemaleddin, "Bu Sene Dutluklar Çok Kalabalık, Kirazın Yerini Dut ve Hıyar Tuttu," *Akşam*, June 19 1935, 7.

52 Y. Ç. "İstanbul'un Mahsul Bayramları: Marul Bostanlarında Hemşerilerimiz Nasıl Eğleniyor," *Akşam*, May 30, 1939, 8.

53 Sermet Muhtar Alus, "İstanbul Kazan Ben Kepçe: Aksaray'dan Yedikule'ye," *Akşam*, January 17, 1939, 11.



Pazar eğlenceleri

Bu sene dutluklar çok kalabalık, kirazın yerini dut ve hıyar tuttu

Beyaz keten elbiseli bayanlarda dut bahçesinden döndüklerini belli eden işaretler!

Kirazların bu yıl vaktinden çok evvel kurtlanması İstanbul halkının duta, daha çok rağbet göstermesine sebep oldu. Bu yıl İstanbulun kiraz ihtiyacını dut karşıladı denebilir. Kirazın kilosu sekiz kuruşa satılırken beyaz dut on, kara dutun kilosu da on beş kuruşa satılıyor.

İstanbul halkından pek çoğu tatil günlerinde kirazı ile meşhur olan Yakacığa gider, kirazı dalından yerdi. Fakat kirazların kurtlanması Yakacığa giden kalabalığı bu yıl Çengelköy ve Mecidiye köyü dutluklarına serpti.

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Pazar sabahı Çengelköye uğrayacak ilk vapur hınca, hınç dolu idi. Dut bahçelerine misafir giden aile grupları akşama kadar Çengelköyde kalacaklarını hesap ederek yemeklerini de almışlardı.

Meğer Çengelköye inen bu kalabalık yalnız dut için değilmiş.. kirazı ve dutu dalından yemek kadar hıyarı da taze, taze koparıp yemek bir zevk işi olmuş!. Kalabalık dut bahçelerine, hıyar bostanlarına dağıldılar. Garibi şu ki, Çengelköy hıyar yeri olduğu halde iskeleden içe doğru uzanan caddenin üzerindeki manavlarda hıyar sanki bir antika gibi gösteriliyordu.

Dutluklarda

Aile gurupları dut gölgeleri altında serilen hasırlar üzerinde yer almışlar, gramofonu kurmuşlar eğlence, dans arasında bir taraftan dut silkiyor, diğer taraftan da avuç, avuç dut yeniyordu. Çengelköyde beyaz duttan fazla ekşi kara dut var. Ağaçların üzerinde, altında müthiş bir kalabalık... Annesi kızına bağırıyor:

— Kız şu bastığın dal incedir. Dikkat et düşeceksin..

Öbür tarafta üstü başı mosmor leke içinde gelen yaramaz çocuk azar işidiyor, bir yanda da kara dutu avuçla yiyen bir bayan, dudaklarının ruju ile karışarak yanaklarına kadar sıvaşan kara dut lekelerini temizlemeğe uğraşıyor...

Öğleden sonra bir iki saat gölgede uyku ile geçti. Tekrar dut ağaçlarına sarıldıla

Hıyar bostanlarında

Hiyar bostanları da dut bahçeleri gibi.. yemeklerini ortaya dizen aile grupları ekmekten fazla hıyara yer vermişlerdi. Henüz kopmuş taze hıyarlar mütemadiyen soyuluyor, tuzlanıp tuzlanıp yeniyordu.

Dut bahçesinde dut toplanırken

Her tarafta olduğu gibi Çengelköyde de bu yıl az hıyar yetişmiş... Mahalle arasında seyyar satıcılardan üçünü beş kuruşa aldığımız küçük hıyarlar yerinde de ayni fiatle satılıyor.. fakat hıyar için bostanlara gelenler bunu hesaba katmıyarak:

«— Hıyarı taze, taze yerinde yemenin zevki de başkadır.»

Diyorlar. Bostanın içinde bahçıvanın etrafını saranlar bir taraftan pazarlık ediyorlar, diğer taraftan da beğendiklerini kopartmak istiyorlar... Hesabını bilen bir ihtiyar ancak dördünü beş kuruşa alabileceğini öne sürerek bu fiatten 50 hıyar koparılmasını emrediyor.. bahçıvanlar memnun:

«— Hıyarın bu yıl az yetişmesi kazanç noktasından bize zarar veriyor, fakat böyle bahçede satmakla pazara çıkarmak zahmetinden kurtuluyoruz.» diyorlar..

Çengelköyünden dönen son vapur görülecek âlemdi. Beyaz ketenden spor elbisesi giyen bayanların, omuzlarında, arkalarında dut bahçesinden döndüklerini belli eden işaretler vardı: Kara dut lekeleri...

Çıra demeti gibi yirmisi bir araya bağlanmış hıyar demetleri de hıyar bostanlarının konuklarına bir işaret oluyordu.

A. Cemaleddin.

Taze hıyarlar toplattırılıyor

Figure 5.1 "The mulberry orchards are very full this year." SOURCE: *Akşam* (June 19, 1935).



İstanbulun mahsul bayramları

Marul bostanlarında hemşerilerimiz nasıl eğleniyor

Her meyva etrafında bir nevi festival tertip etmek ve İstanbulun bir çok semtlerini mevsim mevsim canlandırmak mümkündür

Bir kaç haftadır - hele pazar günleri - marul bayramıydı! Bilmem İstanbul şehrinde mi oturuyorsunuz? Acaba Lânga, Yedikule bostanlarının bulundukları tarafa uğradınız mı? Eğer oralardan geçtinizse iğne atılsa yere düşmiyecek derecede kalabalık olduğunu görürdünüz!

Hele Yedikule... Marulunun nefisliği, zaten âdeta darbimesel haline gelmiş... Göbekli göbekli, yağlı yağlı... (İnsanlarda bu hususiyetler artık ayıp haline geldiği halde marullarda sabık moda devam ediyor!...)

Cidden görülecek bir manzaraydı. Tramvaylar oluk oluk insanlar boşaltıyor. Bakırköyüne işleyen otobüslerde yer yok... Bir taraftan da trenler adam taşıyor... Çoluk çocuk yollara dökülmüşler... Hattâ otomobillerle gelenler bile oluyordu.

Daha uzaktan bostan dolabının gıcırtısı müşterileri davet ediyor. Bostancılar, kahvelerden belediye nizamı ile kadro harici edilen hasır iskemleleri asker gibi dizmişler... Kocaman ağaçların altına yer hasırları da serilmiş... Aileler, sevgililer, bekâr arkadaşlar keyif içinde...

Bostancılar, şakır şakır akan sulara yeşil kümeleri tutuyor. Üst yaprağından birini koparark içine bir tutam tuz atıyo. (Bazıları da bütün marulları ayni fıçıya batıra çıkara yıkıyorlar ya... O da başka...)

Bu eğlence beş kuruşa... İskemlesi, marulu, tuzu, safası, kekâsı çeşmi çerezi, bu paraya dahil...

⁂

Marul Rumca asıllı bir kelime olduğuna göre, Orta Asyadan gelen Türkler bu sebzeyi buralarda bulmuşa benzerler... Fakat iyice benimsemişler... Senede bir kere marul tarlasından geçmek iyi imiş derler... Her halde ilkbahar mevsiminde de iptidailiğe avdet ederek bu tatlı ve nefis otu hatır hatır yemek te zevkli ve faydalı... İnsan vücudünde bir tazelik duyuyor... Marul, hemcinsimizin çiy olarak yediği ender otlardanl

Eskiden:

— Veremlere şifadır! - derlermiş.

Hattâ büyük annelerimden biri, bu tedavi ile sıhhatine kavuştuğunu iddia ederdi.

Sonra doktorlar güldüler:

— Böyle şey olur mu?... Marulun ne kuvveti olacak?... Şayet mikroplu ise insanın tifo olmasına sebebiyet verir... O kadar.

Fakat daha sonradan gene tıbbi telâkki değişti. «Marulun içinde vitaminin en civcivlisi var!» dediler...

Bir bosatnda marullar yıkanıyor

Bostanda marullar toplanıyor

her halde - tifo tehlikesini bertaraf ettikten sonra - yemeli... İnsan iyi bir şey olduğunu vücudünde tecrübe ediyor. Gene eskilerin iddiasına nazaren «kanı temizler» imiş... Bu, en doğrusu olsa gerek...

⁂

Asıl söylemek istediğim:

Marul, İstanbulluların senede bir kaç gün işte böyle Lânga, Yedikule ve sair bostanlar civarında bir nevi bahar bayramı, mahsul bayramı yapmalarına sebebiyet veriyor. Buralarda halk toplantıları teşekkül ediyor.

Fakat yalnız marul etrafında değil, meselâ sonbaharda üzüm etrafında da ayni kalabalık görülmektedir.

Halkın sevdiği bağlar var. Oralara gidiliyor. Şarkılarla, eğencelerle, yemek yemekle bütün bir gün geçiyor...

Türkelr, eğlenirken bir şey yemeyi severler. Bu da hiç tenkid edilecek fena bir huy değildir. (Yalnız tiyatroda fıstık yemek müstesna...) Alaturka musikinin bile bir meze sofrası başında dinlenmesi ayıp sayılmamalıdır. Bu, olsa olsa bir âdet farkından ibarettir.

Bu yazımda şunu söylemek istiyorum ki, marul, üzüm, dut bolluğu zamanlarında İstanbullular bu mahsullerin en bol olduğu yerlere toplanıp buralarını panayır haline getiriyorlar. Böyle toplantıları teşvik etmek, daha hoş bir hale getirmek belediyenin vazifesidir. Hattâ emsalini çoğaltmalı: Kiraz bahçelerinden başlayarak, her münasip semte her meyvanın bir parkını yapmalıdır. Buralarda sabit tesisat yapmağa ha-

Figure 5.2 "Istanbulites are enjoying themselves in the lettuce gardens." SOURCE: *Akşam* (May 30, 1939).

§ 5.4 Cost of Living in Istanbul

One of the historically unchanging problems of Istanbul was the high cost of living. Procurement of food at affordable prices and abundant amounts had not been common to urban dwellers. One illustrative example is that despite being sourced from nearby areas, green grocery prices in Istanbul were quite high.[54] The vegetables and fruits produced in and around Istanbul held a significant place in the diets of urban residents, substituting for the limited access to meat, not as a protein source but as a fiber-rich filler.[55] However, even with the fresh produce, consumer prices reached rather high levels at the market.[56] The main contradiction was that while producers made small profit from sales, consumers had to pay larger amounts. Such imbalances can be traced through the variability and instability of prices in the retail trade within the city. The same type of goods was sold at different prices in various shops within the same quarter. Such fluctuations were seen both among different districts of the municipal territory and across the municipal and provincial borders. [57] Generally, the area inside the city walls of Istanbul was cheaper than the Beyoğlu district. Food could be obtained at prices 30–40% lower from districts like the Balık Pazarı and Yemiş Pazarı in Istanbul.[58] In suburban settlements outside the municipal borders, such as Maltepe, Kartal, and Pendik, food items were sold at significantly lower prices.

This rather steep price range constituted one of the main reasons for urban residents' tendency to migrate toward the relatively cheaper periphery during 1930s, which alerted the administration of the time as a

54 "İstanbul'da Hayat Pahalılığı: Bir Alman Profesörün Tavsiye Ettiği Çareler ve Bazı Mülahazalar," *İstanbul Şehremaneti Mecmuası*, no: 5, (1341/1925): 22-24.

55 Vegetables accounted for 70 to 80 per cent of the city's diet.

56 "Toptan ve Perakende Fiyatlar Arasındaki Fark: Mutavassıt Rolünü Oynayan Birliklerle Mücadele Etmek Lazım," *Akşam*, July 5, 1934, 1.; "Toptan, Perakende: Belediye Fiyatlar Hakkında Tetkikata Başladı," *Akşam*, July 8, 1934, 3.

57 "Gıda Maddelerinde İhtikar Yapılıyor: Fakat Belediye Buna Kani Değildir!," *Cumhuriyet*, May 29, 1931, 2.

58 "İstanbul'da Ucuz Yaşamanın Sırrı Nedir? Ev İdaresini Tamamen Kadınlara Bırakan Erkeklerin Miktarı Artıyor," *Akşam*, December 23, 1936, 5.

hard to control development in a city with limited budget. Aware of the necessity to strike a balance between the uncontrolled expansion of the city and the provision of affordable food, the administration was responsive to the issue. The Ministry of Interior had prepared a draft law to prevent land speculation. According to this proposal, any vacant land, plots, etc., within the boundaries of the zoning plan would not be registered by the land registry offices unless they were inspected by the municipality and treated in accordance with the zoning plan; areas outside the zoning plan but within the municipal boundaries would not be allowed to establish neighborhoods or construct individual houses.[59] Moreover, it was also brought to the fore to leave all the villages surrounding the city outside the new municipal boundaries, while proposing for these villages to be governed by the village law. The villages within the municipal borders that were suggested to be excluded were Kağıthane, Alibey, Mecidiye, Kalitarya, Küçükköy, Akbaba, Dereseki, and Bahçeköy. Eventually, village councils were elected and the villages had separated from the municipal jurisdiction so that their administrative and developmental costs were to be covered by their own revenues.[60]

Whether a settlement was inside or outside municipal boundaries significantly affected various factors such as food inspection, product prices, and shop rents. Therefore, the new village law led to unintended consequences that affected food sanity and prices. The story of Mecidiye village's changing administrative status is explicatory. Both villagers and the administration of the village were not satisfied with the application of the new village law as it had no significant agricultural land or income and was very close to the city center. The new law meant not only increased costs for the village dwellers but also an exclusion from the municipal services they had been receiving until then. Therefore, they

59 "Şehirlerin Nisbetsiz Surette Genişlemesinin Önü Alınaca: Dahiliye Nezareti Bu Maksatla Bir Kanun Projesi Hazırlıyor," *Akşam*, June 26, 1937, 1.

60 "Şehir Hudutları Yeniden Değişiyor: Bazı Köyler Hudut Haricinde Bırakılacak," *Cumhuriyet*, June 8, 1931, 2.; "Yeni Belediye Hududu Tasdik Edildi: Uzak Köyler Hudud Haricinde Bırakıldı," *Cumhuriyet*, June 10, 1931, 2.; "Köy Kanunu," *Cumhuriyet*, July 13, 1931.

initiated efforts to reconnect their village to the city.[61] As a result, the city council decided to reintegrate the village into the municipal boundaries. However, this led butchers of the village to relocate their shops to areas outside the municipal boundaries (such as Zincirlikuyu, Kağıthane, Pendik, and Maltepe) to avoid municipal control and taxes while having access to lower shop rents and lower wholesale meat prices.[62] Similarly, most of the yogurt sold in Istanbul was produced in factories outside the municipal boundaries, and tests had shown that some of the yogurts were adulterated.[63] According to a news article in the Akşam newspaper dated 11 November 1935, most of the yogurt arriving in Istanbul was made in Kalikıratya (Güzelşehir) village. However, because these establishments were outside the municipal boundaries, the regulations of the directive could not be enforced there. After Kalikıratya was incorporated into the municipal boundaries by a decision of the city council for administrative reasons, the yogurt factories there became subject to inspection according to the directive.[64] Another example from the dairy sector was related to milk production. According to the milk regulations, the sale of milk obtained from animals housed in barns that did not meet sanitary standards in the city was prohibited. However, this regulation could not be effectively implemented on the producers within the city borders. This was because a significant portion of the milk sold in Istanbul was supplied by barns outside the municipal boundaries, and not many of them could meet the regulatory requirements. Were the regulation to be fully enforced, milk prices would inflate dramatically. The reason was twofold. First, as the urban producers of milk would have to invest in modern technologies but most of them did not have the financial means to do so.[65]

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61 "Köy Kanunu: Kağıthane, Mecidiye Köyleri Belediye'den Ayrıldı," *Cumhuriyet*, September 21, 1931.

62 "Mecidiye Köyündeki Kasaplar," *Cumhuriyet*, March 3, 1932, 2.

63 "Yoğurtlar: Talimatnameye Uygun Olmayanlar İstanbul'a Sokulmayacak," *Akşam*, May 9, 1935, 3.

64 "Yoğurtlar: Kalikıratya'daki Yoğurthaneler Kontrol Edilecek," *Akşam*, November 11, 1935, 3.

65 "Fenni Ahırlar: Kanunun Maddesi Henüz Köylerde Tatbik Edilmedi," *Akşam*, November 10, 1935, 3.

Therefore a strict control on urban producers would lead to weakening their competitive position against the producers exempted from the urban regulations. Second, it would also reduce production and supply, leading to price increases. Aware of the conditions, the administration had to take de facto measures to adjust the price balance and food security.

Another reason for the high prices of food items sold within the municipal boundaries was the heavy costs added to the production cost at the phase of circulation. Transportation and storage were rather costly because every step included some high profit margins for the intermediaries such as boatmen, porters, wholesalers, and shopkeepers.[66] It was a hot topic of discussion that there was an excessive number of intermediaries between producers and consumers. While it was impossible to completely eliminate intermediaries, it was deemed as necessary to minimize their number.[67] According to experts of the time, both consumers and municipalities had separate responsibilities in the face of the high cost of living in Istanbul.[68] The city's food issue had to be addressed differently than in other cities due to the high population, large area, and insufficient purchasing power of the public. Due to its large population, Istanbul had to supply food items from the farthest regions. This necessity led to the emergence of wholesale trade that collected food items from production points and supplied them to the city, largely with the help of street vendors. On the other hand, the transition from small–scale to large–scale production in fresh vegetable and fruit production drove producers to seek a modern and centralized marketplace (such as a vegetable and fruit wholesale hub) where they could supply their products in bulk.

Strengthening the connection between urban and rural areas has always been an essential strategy for meeting the need for affordable and healthy food in cities. The administration was cognizant that they needed a comprehensive plan to overcome the threefold issue of affordability,

66 Chapter 6 covers this topic.

67 Akşamcı, "Kabzımallara Dair," *Akşam*, June 18, 1936, 3.

68 Asım Süreyya, "Narh ve Serbest Fiat Meseleleri Etrafında Bir Tetkik," *İstanbul Belediye Mecmuası*, no: 112–114, (1933–1934): 215–230.

abundance and public health. A thorough transportation policy (road construction, transport vehicles, etc.) had to be implemented to connect the city with large production areas as much as possible, thereby expanding supply and reducing prices. Additionally, economic objectives had to be considered when determining the routes of the roads to be constructed.[69] Thus, the transportation policy adopted in the 1930s, despite its limited budget, placed maximum emphasis on linking Istanbul and other major cities with one another and with nearby villages. Urban historian Osman Nuri Ergin mentions that transportation and interaction between cities and villages had intensified, particularly due to the increased speed and volume of food transportation. This closer connection between urban and rural areas also made it necessary to expand public health programs to villages. As a result, regulations concerning food products in cities began to be enforced in villages as well. Special emphasis was placed on the cleanliness of food and water coming from rural and semi–rural settlements. The primary reason was that fresh foods such as meat, milk, eggs, vegetables, and fruits arriving from outside Istanbul's municipal boundaries lacked inspection and certification, and the lack of attention to the sanity of water sources directly impacted public health in the cities.[70]

§ 5.5 Porters in the City of Hills

Another significant factor in reducing the cost of living was extending the supply coverage. For the public access to affordable and adequate food, the volume and extent of supply needed to grow. This required the expansion of retail trade units involved in food distribution, such as grocery stores, greengrocers, street vendors, and weekly bazaars.[71] Among these, grocery stores typically sold long–lasting, storable foods (such as clarified butter, olive oil, rice, legumes, etc.). Greengrocers, on the other hand,

69 Ibid., 230.

70 Ali Suat, "Hıfzı Sıhhat ve Sıhhati Umumiye," *İstanbul Şehremaneti Mecmuası*, no. 69 (1930): 307–310.

71 "Hayatı Ucuzlatmak," *İstanbul Belediye Mecmuası*, no: 135–136 (1935): 49-56.

tended to sell less perishable winter fruits and vegetables, often at higher prices.[72] Moreover, retail shops were inadequate in both quantity and spatial distribution to meet consumers' needs. Pointing out to the urgency of reducing the cost of living, an article published in the Municipal Journal discussed that the solution lied in increasing the direct interaction between the producers and consumers. The suggestion was to increase the number of weekly bazaar days, establishing producer and consumer cooperatives to facilitate wholesale transactions at affordable prices. More importantly, the article argued for encouraging street vendors who played a significant role in the sale of perishable goods.[73]

The short shelf life of perishable goods was indeed one of the central issues of securing food supply. The risks involved in trading these goods (spoilage, decay, rotting) were one of the main excuses behind overpricing. Especially during the summer months when vegetable and fruit variety and amount multiply, these had to be delivered to the consumer as soon as they were picked from the branches.[74] Because production and distribution of perishable goods required more attention than durable food groups (such as grains, legumes, etc.), the street vendors and bazaars were more crucial than retail shops in this business. The role of street vendors could not be overemphasized as they circulated nearly 80% of the fresh fruits and vegetables consumed in Istanbul during the 1930s, both expanding the supply area and stimulating demand. Products gathered at the old vegetable and fruit market would be distributed by porters to even the most remote corners of the city within a few hours.[75]

The street vendors consisted of different groups of people in respect to their relationship to the city. First, some of these street vendors who had to carry their goods on their backs to navigate the hilly and winding streets of the city, consisted urban farmers or gardeners. They sold the fresh produce they grew in their own neighborhoods at ferry docks and

72 "Kabzımalların Dileği: Arabasız Seyyar Satıcılığa Müsaade İstiyorlar," *Akşam*, January 18, 1939, 5.

73 Asım Süreyya, "Narh ve Serbest Fiat Meseleleri Etrafında Bir Tetkik," 215-230.

74 "Meyve ve Sebze Hali," *İstanbul Belediye Mecmuası*, no: 99–100 (1932): 642-651.

75 "Hayatı Ucuzlatmak," 49-56.

marketplaces (bazaars). These vendors, who had limited mobility, were typically found in neighborhoods where their gardens and plots were located. After delivering a significant portion of their produce to the old vegetable and fruit market, they would sell the remaining goods either in this manner or at local markets.[76] The second and more prevalent group of street vendors was those who migrated to Istanbul from Anatolian provinces specifically for street trading. Vendors from the Eastern provinces often sold fruits and vegetables like melons, watermelons, mandarins, oranges, and eggplants, typically in bulk amounts. Vendors from the regions of Bozkır, Yenişehir, and Niğde, on the other hand, were more versatile, with a broader range of products that included vegetables, fruits, as well as yogurt and eggs, depending on the season.[77]

> The fruit season (summer) brings a thousand people from Konya to Istanbul. They are strong, sturdy individuals dressed in Konya's traditional attire, including baggy shalwar. They work as street vendors and remain in Istanbul until the grape season ends. With carrying baskets on their backs, they roam the streets. Once the grape season is over, they return to their villages in Konya. Among them, there is an organization. Every twenty people are led by a master (*usta*), who provides them with cheap goods for sale.[78]

This non–local group of vendors sourced their food products from the old vegetable and fruit market. About 40% of this group worked for themselves, while 60% worked on behalf of their master in exchange for payment. After procuring the goods from the wholesaler, the boss would send his vendors to spend the day roaming Istanbul with carrying baskets on their backs. Each vendor determined their prices at the moment of sale based on the neighborhood. Since the street vendors aimed to sell their perishable goods before they spoiled, prices that were high in the

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76 "Meyve ve Sebze Hali," *İstanbul Belediye Mecmuası*, no. 99–100 (1932): 642-651.

77 "Meyve ve Sebze Hali," 642-651.

78 Hikmet Feridun, "Halka Gayet Ucuz Fiyata Meyve ve Sebze Yedirmek Kabil Olacak: Almanya Bizden 500 Vagon Domates, İngiltere 40 Vagon Patlıcan İstiyor," *Akşam*, June 9, 1934, 6.

morning would decrease by the evening.[79] It was believed that street vendors would not be able to perform their main function if they gathered in specific areas, therefore, decision-makers allowed street vendors to roam within the city, except for the main streets.

Towards the end of the 1930s, the Municipality abolished the practice of carrying goods on the back, shoulders, and head, not only for sanitary and humanitarian reasons but also because it was deemed incompatible with the city's civilized image.[80] As a result, street vendors in a city like Istanbul, with its hilly terrain, narrow streets, and slopes, were obliged to use carts. This led to a significant decrease in the number of street vendors.[81] The difficult situation of street vendors such as basket carriers (*küfeciler*) was brought to the forefront by one of the prominent writers of the era, Vâlâ Nurettin, in his column:

> The widow who takes the eggs of the chickens she raised in her garden to sell in a basket (*sepet*)... The gardener who carries the fruits and vegetables he grows... The unemployed young man, who, instead of dying from hunger while searching for work in a factory, carries watermelons through the neighborhood... The orange seller, over sixty, who is not hired because of his age [...] Street vending [...] is not simply a result of laziness or disorder. Especially for Istanbul, a city with scattered areas, lacking distribution systems, and where marketplaces are in the mud, the system of street vendors is a necessity.[82]

An alternative to street vendors was the proposal to establish weekly markets more frequently.[83] However, according to some columnists, such

79 "Meyve ve Sebze Hali," 642-651.

80 The Municipal Executive Committee, Istanbul Metropolitan Municipality Archive: 13407 (September 28, 1937).

81 "Kabzımalların Dileği: Arabasız Seyyar Satıcılığa Müsaade İstiyorlar," *Akşam*, January 18, 1939, 5.; "Belediye Tamimleri," *İstanbul Belediye Mecmuası*, no. 156–167 (1937): 677–678.

82 Vâlâ Nurettin, "Seyyar Satıcılar: Bunların Kalkmasını İsteyen Arkadaşımız Hata Ediyor," *Akşam*, March 14, 1939, 3.

83 "Sabah Pazarları: Yerlerini Tayin İçin Çalışılmaya Başlandı," *Akşam*, September 10, 1937, 3.

a measure could not secure the function street vendors fulfill for certain practical reasons. Street vendors were particularly helpful on supporting families in need. The small–scale credit offered by street vendors to these families could not be provided by market vendors, for unlike street vendors, the latter did not know their customers' home addresses, a situation which restricted establishing a trust–based relationship with families. Therefore, the elimination of street vending would have a more profound impact on the impoverished population.[84]

In the end, such socio–economic necessities prevailed and the decisions taken by the municipal administration remained on paper. Whether with carrying baskets on the backs of humans or donkeys, or with the help of mobile carts, street vendors continued to roam the hilly streets of Istanbul for many more years.

§ 5.6 Establishing A Central Vegetable and Fruit Market

The central collection, storage, and distribution of perishable goods on massive scales is a phenomenon unique to modern cities. Historically, in towns with a somewhat self–sustaining and autarkic food system, it had usually been the residents themselves who produced most of the goods they consumed. Such towns rarely needed for modern facilities like vegetable and fruit markets or slaughterhouses.[85] In an autarkic system, bazaars played a significant role in meeting certain economic needs. The primary purpose of establishing such local markets in small settlements like towns was to allow transactions between producers and consumers to occur without intermediaries. However, as a town grew into a city, the coverage of such markets became rather limited, whereby procurement of food became impossible without sourcing from neighboring areas and far markets, leading to the emergence of an intermediary class (shop owners, market vendors, etc.). As the number of people in this class increased, they had to cluster in specific neighborhoods, resulting in the

84 "Seyyar Satıcıların Bir Hizmeti," *Akşam*, September, 16 1937, 5.

85 Ortaylı, "Tanzimat ve Meşrutiyet Dönemlerinde Yerel Yönetimler," 1–243.

establishment of central food markets (vegetable and fruit markets and slaughterhouses, etc.) in various cities.[86]

The construction of a modern and centralized market and slaughterhouse in Istanbul had been under discussion since the late nineteenth–century. The aim was to centralize the collection and distribution of basic needs such as vegetables, fruit, and meat to regulate the city's food trade. Centralized market complexes in European cities were cited as examples in the newspapers and magazines of the period. For instance, Ottoman journalist and intellectual Agah Efendi wrote on the subject in Servet-i Fünun Periodicals on 30 May 1896, comparing Paris and Istanbul and examining the effects of Paris's urban growth on its food distribution network.[87] *Les Halles* complex built in Paris was considered the precursor of all modern centralized (vegetable and fruit) markets.[88] The French government's difficulty in controlling the numerous markets established across the city played a role in the decision to construct the gigantic marketplace. To enforce the centralized system, wholesale food sales were prohibited in other parts of the city. According to Agah Efendi, consolidating all perishable goods in a single center had several advantages. First, the public could easily access affordable, high–quality food, as they no longer needed to visit multiple stores. Second, the government generated a significant revenue source by renting out the shops within the market.[89] Finally, vendors, thanks to the shops within *les Halles*, were relieved from running around in the rain and mud from two to six in the morning to sell their products. To further emphasize his point, Agah Efendi drew upon the unfortunate plight the gardeners in Istanbul faced:

86 "Meyve ve Sebze Hali," 642–651.

87 Agah Hüseyin, "Paris Pazargah-ı Umumiyesi ve Gezdiriciler," *Servet-i Fünun*, no: 274 (June 11, 1896): 218-220.

88 The halls were built in 1851 over an area of 70,000 square meters at a cost of 60 million francs.

89 The French government had earned billions of francs from the rents of the shops in this hall, built at a cost of 60 million francs. For example, the daily rent was 3 francs for butchers, 1.5 francs for oil merchants and 75 cents for vegetable sellers.

> Let us ask the gardeners who bring vegetables from the fields of Langa, Veli Efendi, Yedikule, and Makriköy by horse at night or from various parts of the Bosporus by boat: how do they spend a snowy January night at the base of a crate? If only these issues were also addressed for the organization of Istanbul... maybe we could rid the city of the unsightly, tattered vegetable stalls and the mess created by their waste. To date, our newspapers have published thousands of articles on this. Residents have repeatedly demanded the removal of these unsightly stalls.[90]

Indeed, both producers, shop owners, and consumers of Istanbul were discontented with the undeveloped state of old vegetable and fruit market area[91] that lied between Eminönü and Unkapanı. According to Necati Şerif, although there were public markets in Anatolia and Istanbul, there was no real vegetable and fruit market (hal) even in Istanbul.[92] Istanbul Municipality owned two basic sheds allocated for vegetables and fruits in Azapkapı, a neighborhood on the southern side of the Golden Horn.[93] Vegetable and fruit producers brought their goods to this marketplace, which was insufficient both in technical standards and in its capacity to meet the demand.[94] The marketplace was opened at midnight and continued until ten o'clock the next morning, drawing thousands of people, including gardeners and vegetable sellers. Since vegetables were consumed daily, the suppliers transferred their goods to the market every day from evening until midnight. Most of the large–scale producers

90 Agah Hüseyin, "Paris Pazargah-ı Umumiyesi ve Gezdiriciler," 218-220.

91 Until the construction of the modern and central fruit and vegetable market (hal) in 1935, it would be more accurate to describe this area as a marketplace.

92 Necati Şerif, "Sebzecilik," 971.

93 Ergin, *Cumhuriyet ve İstanbul Mahalli İdaresi*, 52. See also. Namık Erkal, "Odunkapı Pazarından Sebze ve Meyve Hali'ne: Erken Cumhuriyet Dönemi'nde İstanbul Keresteciler Rıhtımı'nın Mekânsal Dönüşümü," in Cumhuriyet'in Mekânları Zamanları, İnsanları, ed. E. Altan Ergut and B. İmamoğlu (Ankara: Dipnot Yayınları, 2010).; Murat Tülek, Eminönü Sahilinde Mekansal Değişimin İncelenmesi: 20. Yüzyıl Başında Balık Pazarı ve Yemiş İskelesi (Master's Thesis, Mimar Sinan Fine Arts University, 2015).

94 "Kadıköy'de Meyve ve Sebze Halinin Vaz-ı Esas Resmi," *İstanbul Şehremaneti Mecmuası*, no: 13 (September 1925): 28–30.

transported their goods to the old market area. [95] A large part of the harvest would be transported to this marketplace by motorized vehicles. Collecting and distributing the produce from the pier was difficult and time consuming due to the narrow dock area.[96] However, there were also numerous small–scale gardeners who preferred to supply their produce directly to other local markets and vegetable shops. The main reason behind this was the scattered and fragmented nature of Istanbul's neighborhoods. The transportation costs factored in relatively high had the amount of producer's goods were below a certain limit; in other words, it was disadvantageous for the small–scale or subsistence gardeners. Therefore, such local markets played an important role in the sale of fresh vegetables and fruits especially in neighborhoods on the outskirts of Istanbul. These were places where producers and consumers meet directly without intermediaries, enabling a relatively lower price average.[97] (Table 5.16)

95 Hulki, "Sebzecilik," 948–949.

96 Şecaat, "Sebzeciliğimiz," 960.

97 Hulki, "Sebzecilik," 948–949.

Table 5.16 Fruit and vegetable bazaars set up in neighborhoods[98]

Districts	Bazaars
Fatih	Topkapı
	Cerrahpaşa
	Karagümrük
	Unkapanı
	Şehremini
	Beyceğiz
	Yedikule
	Kocamustafapaşa
	Sulumanastır
	Eyüp
Beyoglu	Feriköy
	Tophane
	Galata
	Kasımpaşa
	Şişli
Sarıyer	Yeniköy
	Emirgan
Eminönü	Çiçekpazarı
	Sultanahmet
Bakırköy	Bakırköy
	Yeşilköy
Üsküdar	Yenimahalle
	Selimiye Kışlası
	Beylerbeyi
Kadıköy	Kadıköy
	Erenköy
	Bostancı
Beykoz	Beykoz
	Anadoluhisarı
Adalar	Burgaz Ada

SOURCE İstanbul Belediye Mecmuası, 1935.

The old market area was in such a primitive state that there was no water available for cleaning, waste was dumped along the shores, and the odor became overwhelmingly strong during the summer. Also, the area was quite cramped, hindering the supply of goods and causing constant disorder. As a result, some producers, witnessing their goods go to waste, refrained from production. Lastly and perhaps more importantly for the authorities, due to the market's inadequate conditions, official sales transactions could not be properly recorded, which made it a challenging task to accurately track income and expenses, leading to taxation losses.[99]

In 1931, the central government addressed the issue at the Agricultural Congress held in Ankara. Two reports were prepared regarding the establishment of a planned, modern and centralized vegetable and fruit market in Istanbul. Both of the reports confirmed the unsustainable condition of the existing market place. It was a harsh reality that such a dilapidated place served as the vegetable market center for a major city. This chaotic and shabby area, where a large portion of Istanbul's vegetable and fruit supply was gathered and distributed, where shipments of canned goods were sent to various parts of Europe and America, and where thousands of people worked, urgently needed to be developed. This had been a long–discussed urgency and yet budget constraints had caused successive delays in the undertaking of the project.[100]

The report listed the materials needed to improve and build the Istanbul Fruit and Vegetable Market as follows: 1) A pier wide enough to allow easy and quick distribution of goods arriving by sea 2) Toilets and fountains 3) Large night lights in certain areas 4) A cover over the fruit and vegetable market to provide protection during rainy weather 5) A flat and level surface for placing baskets 6) Cold storage rooms 7) Calibrated weighing scales 8) Roads for the vehicles. 9) Security organization. 10) Development of sales departments.[101]

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98 "Hayatı Ucuzlatmak", *İstanbul Belediye Mecmuası*, no. 135–136 (1935): 54.

99 "Meyve Sebze Hali (Geçen Nüshadan Devam)," İstanbul Belediye Mecmuası, no. 101–102 (January–February 1933): 712–716.

100 Hulki, "Sebzecilik", 948–949.; Şecaat, "Sebzeciliğimiz", 960–961.

101 Şecaat, "Sebzeciliğimiz," 961.

In the following years, Istanbul Municipality began implementing a five–year program. The program identified wholesale markets of goods whose trade and preservation should be subject to certain regulations (fresh produce, fish, etc.), as institutions that the municipality was obliged to establish. Already the existing law had not only assigned duties to municipalities on the matter but also granted them monopoly privileges regarding certain facilities such as slaughterhouses and food warehouses.[102] The reasoning behind the new program was twofold: modernizing the markets would improve the urban image while making a significant contribution to the city's trade and economy. The vegetable and fruit markets of Istanbul (only for sheds) were areas where thousands of producers and consumers interacted, and a total value of 2,500,000 liras circulated. Due to the location of the market not being fully suitable, a significant number of goods were also sold outside the market. Had the transactions made at the dock outside the sheds included, this amount would reach 4,500,000 liras. In 1930, the Municipality's income from the market did not exceed 26,000 liras annually, corresponding to a mere of 0,5% of the estimated turnover. Construction of the prospective central marketplace would mean incorporating the vendors outside the old marketplace in the Municipality's system, thus increasing the revenue from fees for weighing and storage services. This would be a considerable addition to the increase of income for the Municipality that was expected from taxes and rents, which was estimated to be quadrupled, amounting up to 100,000 liras, around 2% of the total turnover.[103]

Spending half a million liras, the Municipality had already purchased the old timber merchants' fire site,[104] a 3,5 hectare land on the same shoreline with the old marketplace between Eminönü and Unkapanı, in order to fulfill the plan.[105] However, this initiative was put on hold due to

102 Ali Suat, "İktisadiyatımız Etrafında," 266–269.

103 Muhlis Ethem, "İstanbul'da Arsa Spekülasyonu ve Mesken İnşaatı," 761.

104 The French government had earned billions of francs from the rents of the shops in this hall, built at a cost of 60 million francs. For example, the daily rent was 3 francs for butchers, 1.5 francs for oil merchants and 75 cents for vegetable sellers.

105 Ergin, *Cumhuriyet ve İstanbul Mahalli İdaresi*, 51–52.

the economic crisis that broke out in 1929. Building a central vegetable and fruit market was seen as playing a significant role not only within the city but also in the economy of the surrounding provinces that supplied fresh produce to Istanbul. For this reason, the government attached particular importance to the location of the new market.[106] The key point was to ensure that it was suitable for the easy collection and distribution of goods. The reason for choosing the coastal strip between the two bridges of Galata and Unkapanı was not simply utilizing a previously purchased asset but the fact that 80% of Istanbul's vegetables and fruits were transported by sea.[107] Eventually, the foundations of the modern and central market complex were laid in 1933, on the occasion of the tenth anniversary of the Republic, and it became operational in 1935.[108]

§ 5.7 Production Areas for the Vegetable Market

The amount of vegetables and fruits entering Istanbul was not fully known even after taking the transactions under control by the establishment of the new central market. The main reason behind it was that the total vegetable and fruit production within the city far exceeded the amount brought to the market area. The products grown in the vineyards, gardens, market gardens, and fields within the city were sold near the locus of production. As a result, due to the high cost of living (with limited meat consumption), at least half of the vegetables and fruits, which made up 70% or 80% of the city's supplementary food, was consumed without being recorded.[109]

Fresh produce arriving at the market area in Istanbul was sourced from various parts of the city. The closest suppliers were the gardens

106 "İstanbul'un Mühim Meseleleri: Vali Temas İçin Dün Ankara'ya Gitti," *Cumhuriyet*, April 21, 1935, 6.

107 Ergin, *Cumhuriyet ve İstanbul Mahalli İdaresi*, 52.

108 This hall was intended to be a temporary solution due to budget constraints. Later it would either be expanded as needed or a new hall would be built on the same site.

109 "Şehrin Bir Senelik Sebze ve Meyve Sarfiyatı," *İstanbul Şehremaneti Mecmuası*, no: 31, (March 1927): 415-421.

both inside and outside the city walls. Next circle consisted of Anatolian and European suburbs. On the Anatolian side, they followed a route starting from as far as Yalova, passing through Tuzla, and Pendik, and extending all the way to Anadolu Feneri towards the northern corner of the Bosporus. On the European side, they followed a line starting from Küçükçekmece, passing through the city, and reaching toward Rumeli Feneri, the other landmark on the northernmost point of the western side of Istanbul. Within this vast area, 1,200 market gardens were identified, excluding the dry, rain–fed fields. In addition, settlements along the Marmara Sea coast, such as İzmit, Karamürsel, and Hereke, sent seasonal fresh vegetables and fruits. The Anatolian coasts, including Maltepe–Pendik, İzmit, and Yalova, were also of significant importance for the city's vegetable supply, as early production was also carried out in these areas.[110] (Figure 5.3).

110 "Meyve ve Sebze Hali" *İstanbul Belediye Mecmuası*, no. 101–102 (1933): 712–716.

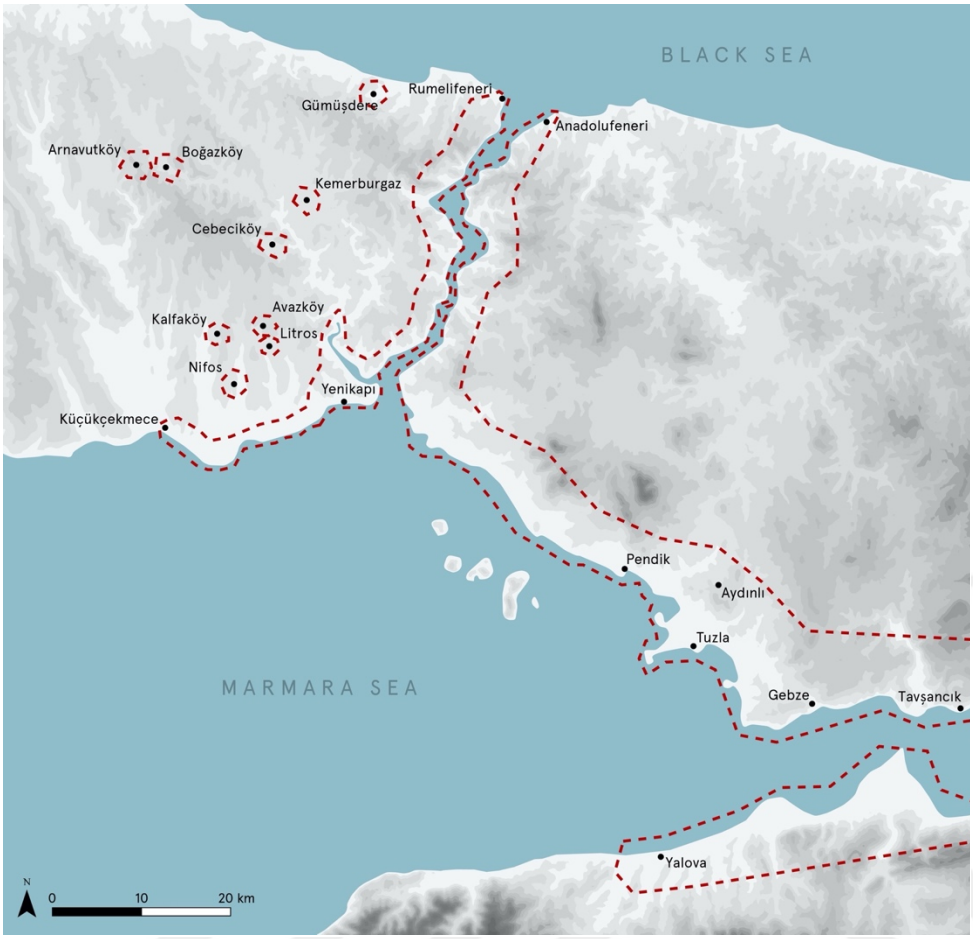


Figure 5.3 The prominent agricultural areas in Istanbul. SOURCE: *Istanbul Belediye Mecmuası* (January, February 27, 1933).

The establishment of a centralized, organized, and regulated fresh vegetable and fruit market in Istanbul sparked significant interest on the producers outside the aforementioned region. The new market system stimulated the supply, both by involvement of more distant producers and by incentivizing creation of new production regions. The already connected suppliers of the Istanbul market (e.g., Istanbul's villages, Bursa, Çanakkale) began sending as much produce as possible to the city, believing that their goods would find their true value in the market.[111] Additionally, the establishment of the central market coincided with the increase in railway transportation connections across the country, leading to the

111 Akşamcı, "Halin Faydası," *Akşam*, July 7, 1936, 3.

import of vegetables and fruits from rather distant warmer provinces. Towards the end of 1930s, fresh vegetables and fruits arriving in Istanbul were alternating between several different regions, depending on the season. The earliest produce (*turfanda*) came from warmer provinces from some 800 to 1000 kilometers away such as Mersin, Adana, and Silifke, while the second round of early produce arrived from towns of Izmir and Western Anatolian provinces. By the time these regions began their second round of early crops, the first early season produce from Istanbul's coastal area, stretching from Maltepe–Kartal–Pendik would have already appeared. The produce from these regions was referred to as "red soil produce." Later came the crops known as "mid–season" or "black soil produce," which included the yields from Yedikule, Kumkapı, Topkapı, and other areas of the city. As these crops neared the end of their season, two additional rounds of produce emerged as the final harvests: these included the second plantings from the Maltepe–Kartal–Pendik area and the yields from regions influenced by the Bosporus climate, such as Kemerburgaz, Boğazköy, Beykoz, Akbaba, and Anadoluhisarı, which consisted distant northern neighborhoods of the city.[112]

112 Necmi Erkmen, "İstanbul'da İyi Sebze Yetişmesinin Sebebi Nedir?," *Akşam*, May 27, 1938, 6.

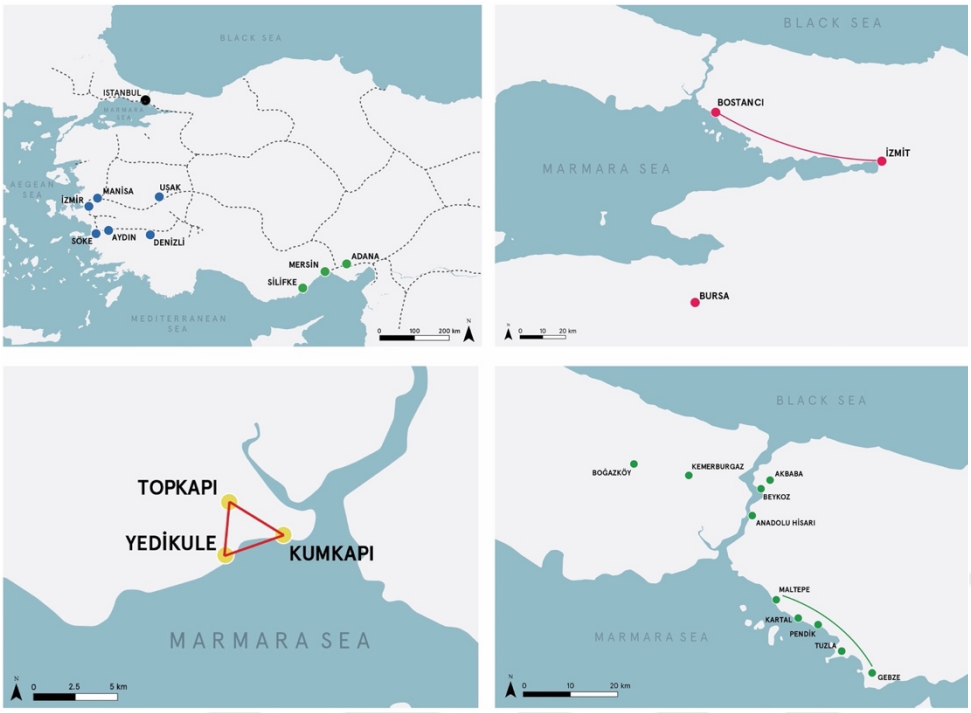


Figure 5.4 Seasonal rotation of vegetables arriving in Istanbul in the late 1930s. SOURCE: *Akşam* (May 27, 1938).

Istanbul's clay–rich soils and the mineral salt content in its water made it suitable for vegetable farming, so vegetables labeled as "local" produce generally attracted more demand than those coming from "outside." Agricultural engineer Necati Şerif Bey confirms that vegetables coming from the countryside used to be disliked by the city's residents.[113] Additionally, in the city's mild climate, vegetables and fruits could grow sufficiently in size physiologically before bearing fruit, unlike those grown in hotter climates. For example, in Istanbul, flat beans would reach a height of about 1,5 meters before bearing produce, whereas in Adana, they would yield crops prematurely at under half a meter and age more quickly.[114] However, over time, vegetable cultivators in other provinces also began to obtain high-quality seeds from Istanbul to grow vegetables

113 Necati Şerif, "Sebzecilik," 968.

114 Necmi Erkmen, "İstanbul'da İyi Sebze Yetişmesinin Sebebi Nedir?," *Akşam*, Mayıs 27, 1938, 6.

that were indistinguishable from the "local" produce to the consumer of Istanbul.

§ 5.8 Technologies that Bring Distance Closer

Transport difficulties in the first half of the 1930s (with infrequent train services and high fares) meant that fresh produce, especially vegetables, did not reach the market on time due to transport costs and technological inadequacies, resulting in spoilage. The producer had to sell their crops at throwaway prices in local markets or leave them to rot along the train tracks.[115] For example, due to the cost of transportation, gardeners from Bursa could not send their products to Ankara, causing vegetable and fruit prices in Ankara to rise by perhaps fifteen or twenty times.[116] Lapsekili farmers, due to adverse weather conditions, were often unable to ship their products to Istanbul; grapes and other fruits would rot in the baskets and ultimately end up being thrown into the sea.[117] Farmers from Silivri complained about the poor condition of the Küçükçekmece–Silivri road. If this road was improved, it would be possible to reach Istanbul in 1,5 hours, and Silivri would become a district of Istanbul. As a result, vegetable prices in Istanbul would decrease.[118] Istanbul's fishermen were complaining about the transportation conditions and costs. The price of the mackerel caught in Kilyos was not worth the cost of transporting it by motor to the fish market. Therefore, instead of wasting money transporting the fish to the market, the fishermen would throw them into the sea. They wanted to send the mackerel to Anatolia, especially to cities along the railway lines (Ankara, Eskişehir, Kütahya, etc.).

115 "Şark Şimendiferlerinin Çok İyi Bir Teşebbüsü: Trakya'daki Meyvaların Nakli İçin Tenzilatlı Bir Tarife Yapılıyor," *Cumhuriyet*, August 3, 1929, 2.

116 "Bursa'da Marul 20 Paraya: Sebze ve Meyve Ucuzluğu Bursa'nın Nüfusunu Günden Güne Arttırıyor," *Cumhuriyet*, May 25, 1932, 3.

117 "Lapseki'den Yaş Meyve Gelemiyor: Birçok Mal Vesaitsizlikten Çürüyor," *Cumhuriyet*, July 24, 1933, 2.

118 Hikmet Feridun, "Silivri'de Dağ Gibi Samanlar Niye Para Etmiyor? İstanbul'da 160 Kuruşa Satılan Barbunya Silivri'de 20 Kuruşa," *Akşam*, October 5, 1934, 1.

They preferred to see the fish from the Bosporus in wagons at Haydarpaşa rather than being thrown into the sea. The main demand for Istanbul's fish came from abroad (particularly from Balkan countries).[119] However, transportation costs and foreign exchange restrictions were reducing export opportunities.[120]

The high cost of transport vehicles also had a negative impact on the cost of living. Almost all of Ankara's fruit and vegetable supply came from outside the city, and the addition of high transport costs to food prices led to exorbitant costs. In two successive reports in 1932 and 1933 to the prime minister, Interior Minister Şükrü Kaya discussed the necessary measures to be taken regarding the high cost of living in Ankara. The first was to increase vegetable growing in the city,[121] the second was to reduce freight rates for provisions carried on intercity trains.[122] However, it was not until 1938 that rail freight rates were not reduced.[123]

The country became more integrated from the second half of the 1930s through investment in transport and a policy aimed at boosting foreign trade and strengthening the internal market, among other things. The railway policy adopted, in particular the reduction in train fares and

119 "Balık Bolluğu, Tutulan Palamutlar Tekrar Denize Dökülüyor: İçerilere Balık Sevkiyatını Yoluna Koymak İçin Tedbir Almak Lazımdır," *Akşam*, May 26, 1934, 1.

120 Exporting perishable goods was a profitable yet challenging business that required great care due to its risks. When exports were not possible, production remained limited. Balkan countries, particularly Bulgaria and Greece, dominated the market for sending fresh food to Central Europe. In 1932, Bulgaria exported 1,260 wagons, and Greece 130 wagons of fresh vegetables and fruits. In contrast, Turkey's exports, thanks to the efforts of a few entrepreneurs, barely reached 1–2 wagons. There were several reasons for this. First, Bulgaria and Greece were closer to European markets than Turkey, which meant lower transportation costs. Due to their proximity and availability of refrigerated wagons, Turkey's neighbors were able to send their fresh produce (high–value goods) more easily to markets in Austria, Hungary, Czechoslovakia, and Germany. Moreover, packaging technology was much more advanced in these countries. Reduced train tariffs and easier transit between countries also gave these nations an advantage. See. Hayrettin Şükrü, "İhmal Ettiğimiz Bir Servet: Yaş Meyve İhracatı," *Cumhuriyet*, August 9, 1933, 1.

121 BCA Catalog no. 30.10.0.0 – 184 / 269 / 1

122 BCA Catalog no. 30.10.0.0 – 152 / 76 / 17

123 BCA Catalog no. 30.10.0.0 – 83 /543 / 4

the increase in the number of departures, has led to greater interregional integration and mobility.[124] Investments made in the nineteenth century were primarily foreign investments aimed at connecting port cities like Istanbul, Izmir, and Mersin, along with their hinterlands, to the global market. In the twentieth century, after the establishment of the new regime, the investments focused on the overall integration of the country. During this period, the length of the railways in the Anatolian provinces, which was 4,559 kilometers in 1923, had reached 8,637 kilometers by 1940. (Figure 5.5, Figure 5.6, Figure 5.7, Figure 5.8, Figure 5.10 Figure 5.11, Figure 5.12). The state railways also had docks in Haydarpaşa (Istanbul), Derince (Kocaeli), İzmit (Kocaeli), Sapanca (Sakarya), Filyos (Zonguldak), Samsun, Mersin and Izmir.[125] These docks ensured the integration of trains and cargo ships.

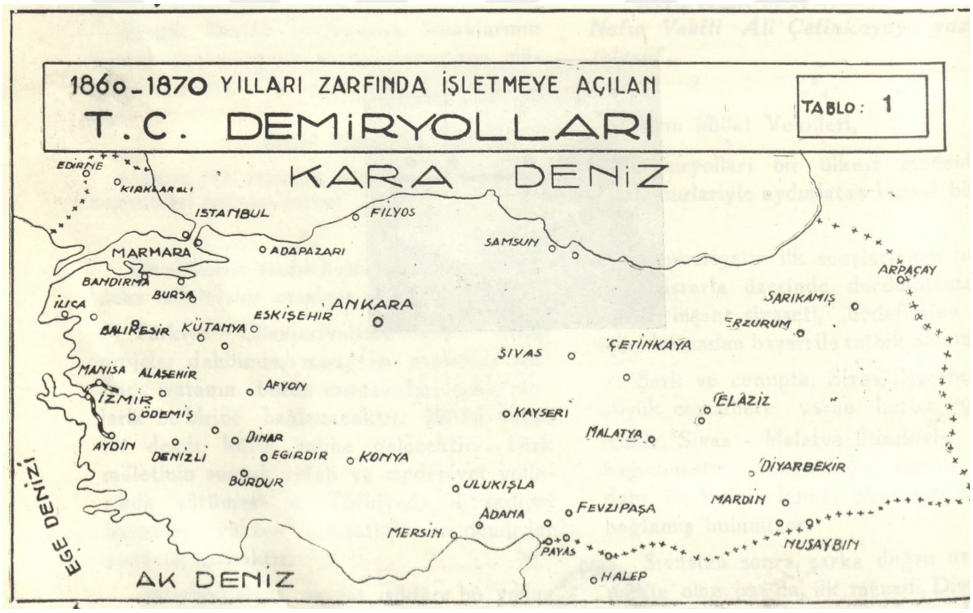


Figure 5.5 The rail lines that were opened within the borders of Turkey between 1860 and 1879. SOURCE: *Demiryollar Dergisi*, (October 1938).

124 "Avrupa'ya Yaş Sebze ve Meyve Çıkışı: Şark Demiryolu Ücretlerinde %50 Tenzilat Yapıldı," *Cumhuriyet*, August 9, 1935, 1.

125 "D.D. Yolları Mali Yılı Bütçesi Esbab-ı Mucibesi," Demiryollar Dergisi, no. 162 (Ağustos 1938): 746.

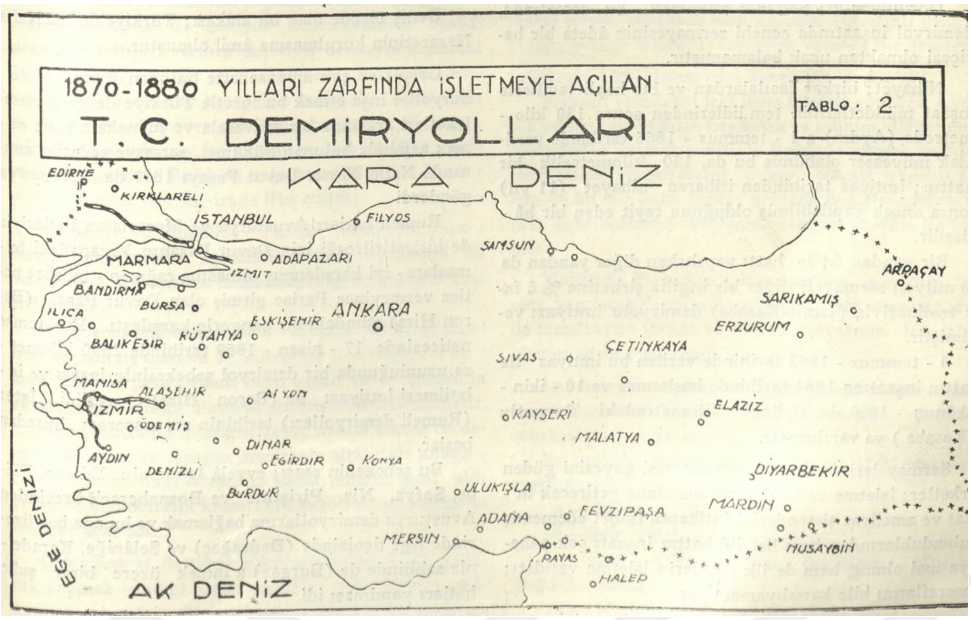


Figure 5.6 The rail lines that were opened within the borders of Turkey between 1870 and 1880. SOURCE: *Demiryollar Dergisi*, (October, 1938).

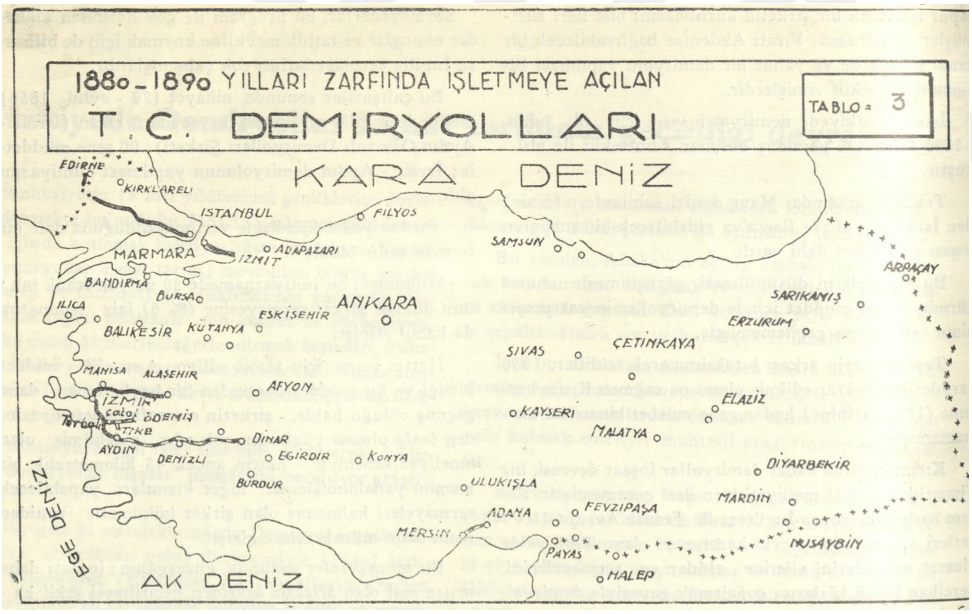


Figure 5.7 The rail lines that were opened within the borders of Turkey between 1880 and 1890. SOURCE: *Demiryollar Dergisi*, (October, 1938).

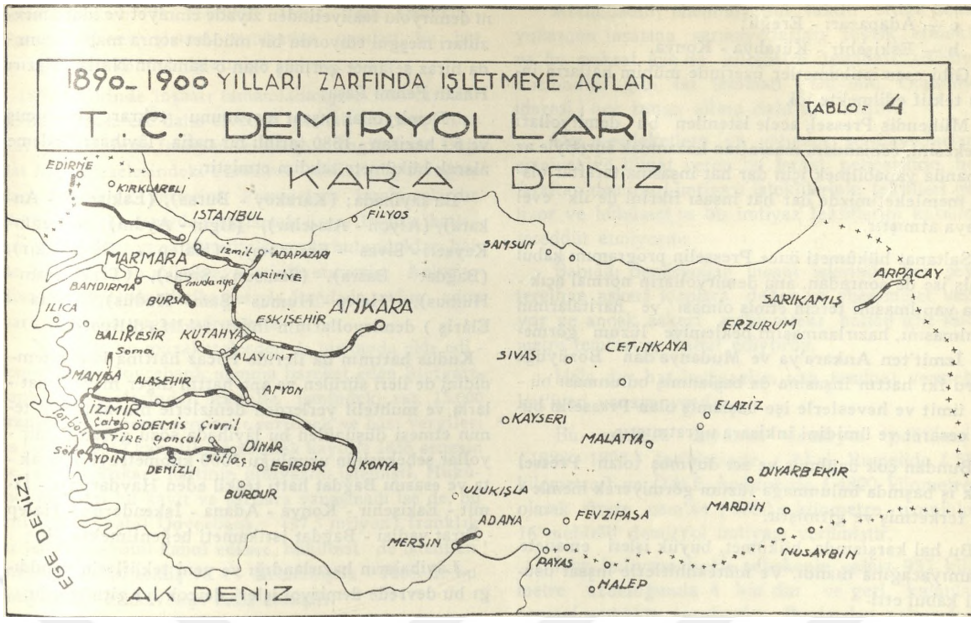


Figure 5.8 The rail lines that were opened within the borders of Turkey between 1890 and 1900. SOURCE: *Demiryollar Dergisi*, (October, 1938).

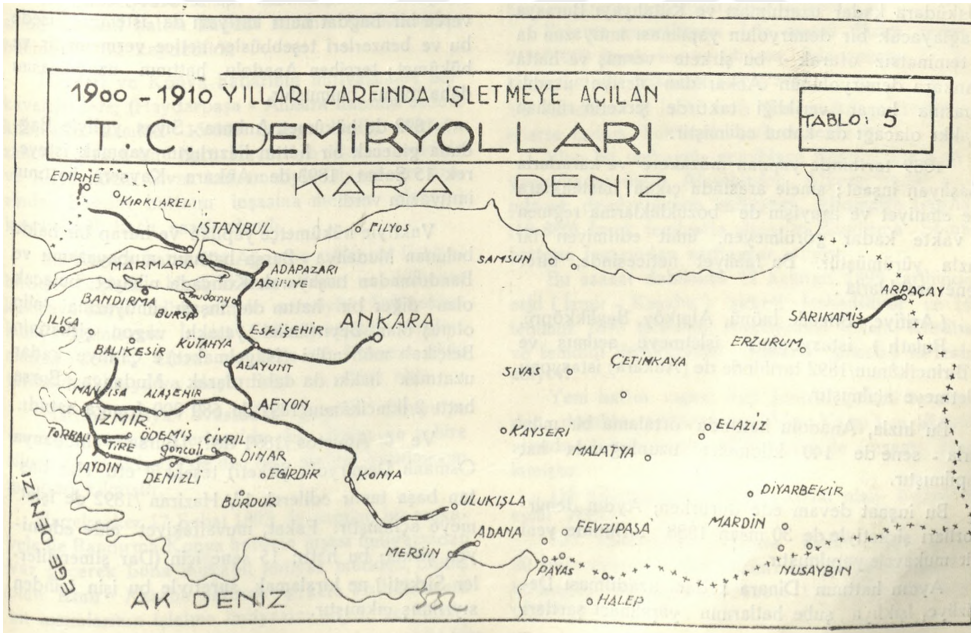


Figure 5.9 The rail lines that were opened within the borders of Turkey between 1900 and 1910. SOURCE: *Demiryollar Dergisi*, (October, 1938).

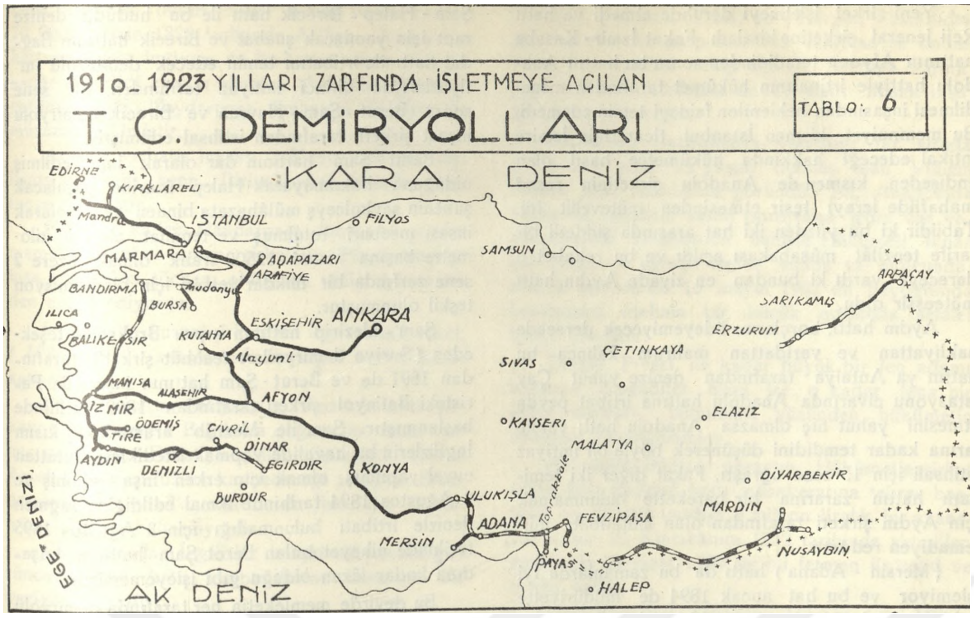


Figure 5.10 The rail lines that were opened within the borders of Turkey between 19100 and 1923. SOURCE: *Demiryollar Dergisi*, (October, 1938).

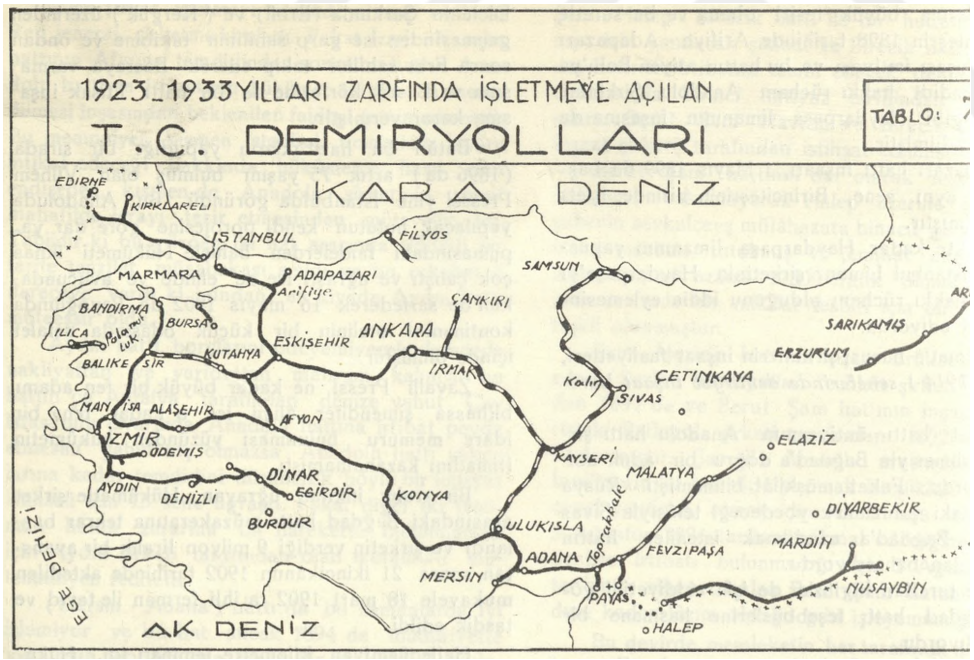


Figure 5.11 The raillines that were opened within the borders of Turkey between 1923 and 1933. SOURCE: *Demiryollar Dergisi*, (October, 1938).

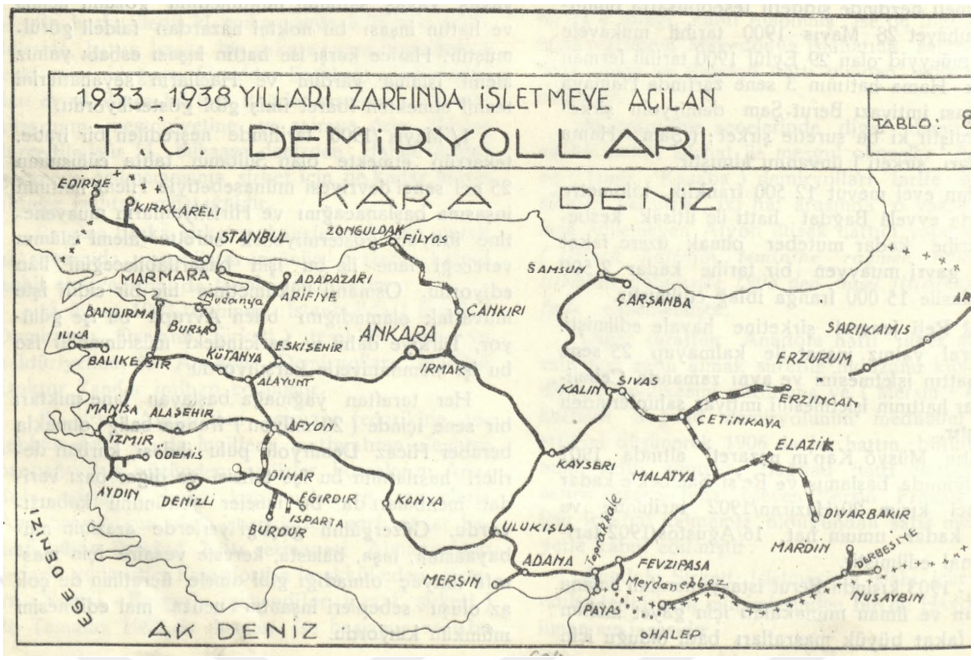


Figure 5.12 The rail lines that were opened within the borders of Turkey between 1933 and 1938. SOURCE: *Demiryollar Dergisi*, (October, 1938)

By reducing train fares and increasing the number of departures, agricultural products produced in rural areas would find more space in urban markets. In addition, the opening of a modern vegetable market in Istanbul in 1935 helped to make the buying, selling and distribution of vegetables relatively more organized, encouraging growers to send their produce to the Istanbul market. The vegetables sent to the market were usually those that were easy and cheap to transport because they were grown in fields along the railway lines. These vegetables, such as okra, beans, and artichokes were more durable than other vegetables such as lettuce, spinach, etc.[126] The railways gradually became a mass and efficient means of transport, linking agricultural production centers with consumption ones.[127] The reduced tariffs offered by the railways, especially for melons, watermelons, fresh vegetables and fruit, made it possible to transport them to distant consumption centers. This made these

126 Ege, "Umumi ve Hususi Sebzecilik", 6–7.

127 "Birinci Köy ve Ziraat Kalkınma Politikası: Ziraat Kalkınması Bahsinde Demiryol ve Su Politikamız," Demiryollar Dergisi, no. 168 (Şubat 1939): 1057.

foods cheaper and more abundant than in previous periods.[128] Between 1932 and 1937, the amount of fresh vegetables transported by railways increased exponentially. In 1932–1933, the amount of fresh vegetables transported by railways was 11,256 tons, while in 1936–1937 this figure had risen to 30,857 tons. (Table 5.17, Table 5.18)

Table 5.17 The amount of fresh vegetables transported by railway over the years (1932–1937)

Year	Ton	Percent %
1932-1933	11,256	11,8%
1933-1934	14,097	14,7%
1934-1935	16,725	17,5%
1935-1936	22,375	23,5%
1936-1937	30,857	32,3%
Total	95,310	100%

SOURCE Demiryollar Dergisi (February 1939).

128 Ibid., 1057.

Table 5.18 The amount of food and goods transported by railway over the years (1932–1937)

Food/Goods	1932 1933	1933 1934	1934 1935	1935 1936	1936 1937
	(Ton)	(Ton)	(Ton)	(Ton)	(Ton)
Wheat	186,718	202,988	304,233	188,353	449,956
Barley	40,015	44,525	158,094	45,173	89,695
Other grains	30,169	63,474	53,237	35,928	113,604
Rice and paddy	5,716	8,304	9,277	13,443	15,869
Fresh vegetable	11,256	14,097	16,725	22,375	30,857
Dry vegetable	8,082	11,495	32,422	18,576	21,147
Sugar beet	34,733	120,357	296,020	193,079	284,118
Tabacco	10,676	12,364	20,299	27,094	39,221
Timber	39,417	42,751	57,689	68,556	74,506
Agricultural machines	990	1,343	1,850	3,191	5,981
Raw cotton	3,793	6,009	28,092	44,531	61,543
Citrus fruits	1,909	2,424	5,107	6,606	3,623

SOURCE Demiryollar Dergisi, (February 1939).

The second half of the 1930s saw a significant increase in the amount of fresh fruit and vegetables transported by railway. In the financial year 1934–1935 this was 60,290 tons, while in the financial year 1936–1937 it had risen to 88,068 tons. (Table 5.19). The increase in the volume of fresh fruit shipped from major railway stations in Turkey was also noteworthy. For example, in 1934–1935, 90 tons of fruit were shipped from the Samsun railway station, while in 1935–1936, 669 tons were transported. The amount of fruit shipped from Bursa railway station increased from 491 tons to 2,743 tons in one year. (Table 5.20).

Table 5.19 The amount of fresh vegetables and fruits transported by railway over the years (1932–1937)

Goods	1932/1933	1933/1934	1934/1935	1935/1936	1936/1937
	(Ton)	(Ton)	(Ton)	(Ton)	(Ton)
Fresh Vegetables	11,256	14,097	16,725	22,875	30,857
Oranges, Lemons, etc.	1,909	2,424	5,107	6,606	2,523
Watermelon	-	-	16,004	25,840	26.048
Fresh Fruits	-	-	22,554	26,517	26,640
			60,390	81,738	88,068

SOURCE Demiryollar Dergisi, (August, 1938).

Table 5.20 The amount of fresh fruit shipped from the main stations in Turkey (1934–1936)

City	1934/1935	1935/1936
	(Ton)	(Ton)
Büyük Derbent (Kocaeli)	418	502
Sapanca	1,524	2,863
Adapazarı	386	643
Samsun	90	669
Bursa	491	2,743
Niğde	770	1,383
Amasya	2,863	2,020
Toprakkale (Osmaniye)	4,447	5,718
Mersin	623	868
	12,422	17,409

SOURCE Demiryollar Dergisi, (August, 1938).

The main reason for this increase was a reduction in train tariffs on the state railways. The fares charged by private and state–owned railways differed significantly. For example, the transport cost per ton of fresh fruit and vegetables per kilometer on the Aydın line was 5 piasters for the private companies and 2,75 piasters for the state railways. On the İzmir line, the difference was even greater: 11 piaster was charged by private companies and 2,75 piaster by the state railway. The government wanted to

strengthen the national economy by introducing low tariffs on the state railways.[129] As the number of people and goods transported increased, so did the interaction between people and commercial activity. In addition, freight tariffs for foreign trade have been revised and new tariffs have been introduced for certain goods, taking into account the economic needs of the country. For example, agreements have been made with Greek and Bulgarian railways to transport fresh and dried vegetables, fruit, eggs, tobacco, fish and other food products between Istanbul and Central and Northern Europe.[130]

In order to increase the distribution of fresh fruit and vegetables to domestic and foreign markets, the issue of packaging was as important as the possibilities offered by tariffs and transport systems. To this end, a German expert, Mr. Kule, was invited to carry out a study and feasibility analysis on the matter.[131] In addition, the State Railway Administration had introduced mobile "school wagons" containing packaging samples to demonstrate different packaging techniques to the public.

Fresh fruit and vegetables, which were likely to make up a significant proportion of the railways' main freight, were perishable and therefore needed to be transported in fast and refrigerated wagons or ships. Fruit and vegetables can be stored in cold stores for periods ranging from a few days to 8–11 months.[132] Depending on the season and the type of fruit and vegetables to be transported, ordinary (adi), refrigerated (refrijeran), isothermal (izoterm) or frigorific (frigorifik) wagons were used for rail transport. In refrigerated wagons, the desired temperature was achieved by placing ice in the designated areas of both buffers. Isothermal wagons could maintain the temperature inside for a certain period of time. Frigorific wagons, on the other hand, provided cooling through mechanical systems. Frigorific wagons were the most suitable for

129 "Birinci Köy ve Ziraat Kalkınma Politikası", 1057.

130 "D.D. Yolları Mali Yılı Bütçesi Esbab-ı Mucibesi", 744.

131 BCA Catalog no. 30.18.1.2 – 28/37/2

132 IV. Beş Yıllık Kalkınma Planı: Yaş Meyve - Sebze Pazarlaması ve Organizasyonu Özel İhtisas Komisyonu Raporu, Yayın No. DPT: 1538 – ÖİK: 232 (Ankara: T.C. Başbakanlık Devlet Planlama Teşkilatı, 1977), 35.

transporting fresh fruit and vegetables. The longer transport time by railway increased this requirement. For example, a freight train would take 9 days to reach Austria, 10 days to reach Switzerland and 11 days to reach West Germany from Mersin.[133]

After World War I, the Republic of Turkey had 5,116 wagons of various specifications. Only 60 of these wagons were fitted with a cooling system. The number of such wagons had increased over the years. Government authorities carried out research into the promotion of this type of wagon.[134] Freight wagons were not limited to closed wagons, open wagons. Especially after the war, wagons for the transport of live chickens and animals, coal and fresh vegetables became more common.[135] (Table 5.21). These types of wagons were considered commercially favorable because they carried products with high economic returns. The average speed of freight trains with handbrakes was 30–45 kilometers per hour. The express (non–stop) freight trains carrying perishable goods could reach speeds of 50–60 kilometers per hour. However, air–braked freight trains could reach speeds of 60 to 70 kilometers per hour.[136] A significant proportion of express train traffic consisted of perishable goods such as fresh vegetables and fruit, slaughtered meat, poultry and game, yoghurt and seafood. As these items were heavily discounted in the tariff schedules, the transport made steady progress.[137]

133 IV. Beş Yıllık Kalkınma Planı, 39.

134 BCA Catalog no. 30.10.0.0 – 76/27.

135 "Romanya Devlet Demir Yolları," trans. Suat Bolayır, Demiryollar Dergisi, no. 169 (Mart 1939): 1134.

136 "Yük Malzemesinin Tevziatı: Bu Malzeme Rotasyonunun Etüdü, Rotasyonu Teşkil Eden Elemanlar, Rotasyon Müddetinin Azaltılması," Demiryollar Dergisi, no. 160 (Haziran 1938): 675.

137 TBMM Zabıt Ceridesi, term 5, vol 25, 20 May 1938, p. 33.

Table 5.21 The types and number of wagons in Turkey after World War I.

Types of wagons	Number
Closed wagons	1930
Open wagons	2276
Flat and open wagons	320
Refrigerated wagons	60
Wagons for live chickens and birds	60
Wagons for coals	144
Wagons for live fish	6
Wagons for express mail packages	130
Large-capacity wagons	190
Total	5.116

SOURCE Demiryollar Dergisi, (March 1939).

In this period when national economy and development were the main motivations, the government prioritized the improvement of agricultural lands (irrigation, draining of swamps, etc.) in parallel with the railway policy. To this end, the Ministry of Public Works has accelerated the construction of an irrigation system and the draining of swamps in the Adana plain. Similar policies have been implemented in regions such as Tarsus, Mersin and Silifke. By 1939, the area of Çukurova irrigated by the Ceyhan and Seyhan rivers had exceeded 2,000,000 hectares. Every part of Çukurova was cultivated. In addition to cotton, the plain was also home to vegetable fields, vineyards and orchards [138] The government wanted to contribute to the national economy not only through Çukurova but also by establishing new vegetable fields and fruit orchards in the regions of Dörtyol (Hatay), Mersin and Antalya.[139]

According to the report of the first Village and Agricultural Development Congress, 1938 (Birinci Köy ve Ziraat Kalkınma Kongresi, 1938), the key points necessary for the development of vegetable production in Turkey were as follows: 1) Identification and registration of vegetable

138 "İktisadi Bünyemizde Münakalât ve Ziraat Mevzularından," Demiryollar Dergisi, no. 170 (Nisan 1939): 156–65.

139 Birinci Köy ve Ziraat Kalkınma Kongresi, 10.

varieties 2) The division of vegetable production areas into regions. This means organizing production areas so that crops are supplied in successive series according to climatic zones 3) The division of fresh, dry and canned vegetable production by region 4) The improvement of vegetable seeds 5) Training of qualified personnel and adaptation of new techniques 6) Improving vegetable transport conditions.[140] According to the report, vineyards and market gardens should be distributed regionally. For example, large quantities of vegetables have been imported from southern European countries where the climate is suitable for early season production. In Turkey, large cities such as Istanbul, Izmir, etc. met their vegetable needs from gardens located around the cities. By the end of the 1930s, however, these major cities had begun to meet some of their vegetable needs with early–season produce from warm provinces suitable for early vegetable cultivation, such as Adana, Izmir, Mersin and Dörtyol. By being able to produce early season vegetables without the need for greenhouses, these regions were able to limit their expenditure.[141] For this reason, the government needed to encourage the development of early season vegetable production, especially in the southern coastal region.[142] The report (1938) listed the immediate measures to be taken to improve harvesting and transport as follows: 1) The improvement of the packaging techniques 2) Standardization of fruit and vegetables produced for commercial purposes 3) Supply and distribution of crates, baskets, etc. in fruit and vegetable transport areas 4) Establishment of standard containers for the transport of fruit, vegetables and grapes 5) Preparation of a directive on the transport of fruit and vegetables and reduction of tariffs.[143]

140 Ibid., 23.

141 Ibid., 39–40.

142 BCA Catalog no. 30.18.1.2 – 86/21/3

143 Birinci Köy ve Ziraat Kalkınma Kongresi, 48

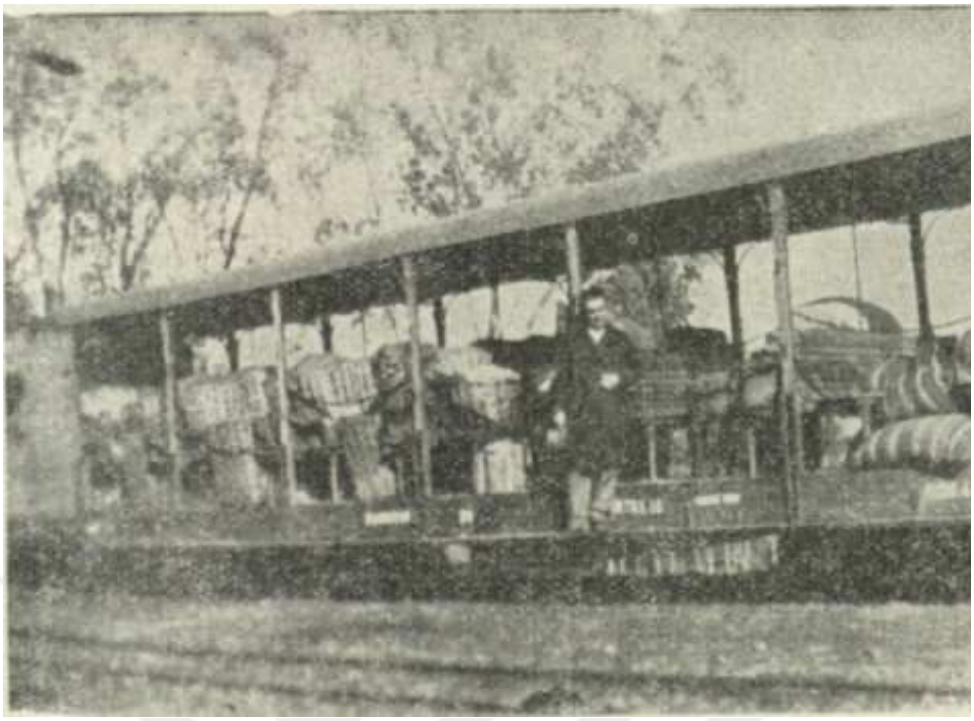


Figure 5.13 Fruit and vegetables are transported by rail in wagonloads. SOURCE: *Demiryollar Dergisi* (February, 1939).



Figure 5.14 Transport of fresh fruit and vegetables by railways.. SOURCE: *Demiryollar Dergisi* (February, 1939).



Figure 5.15 Mersin vegetable market. SOURCE: *Demiryollar Dergisi* (February, 1939).



Figure 5.16 Growers wait for the train to load their fresh fruit and vegetables at Çerikli railway station, Kırıkkale. SOURCE: *Demiryollar Dergisi* (February, 1939).



Figure 5.17 Fresh vegetables and fruit are brought in by carts to be loaded on to the wagons, Basmahane/Izmir. SOURCE: *Demiryollar Dergisi* (February, 1939).

§ 5.9 Concluding Remarks

Istanbul, especially in the early 1930s, had the potential to be an agricultural city rather than an industrial or commercial one. It was two to three times higher than the national average in terms of the area devoted to market gardens, orchards and vineyards. The city's agricultural potential and how to exploit it were discussed in detail in the municipality's official publication, in newspapers and in the congress reports (1931 and 1938). As well as contributing to the urban economy, the market gardens, orchard and vineyard provided a place for leisure and culture. However, the agricultural potential of the city was not fully realized.[144]

144 The reasons for this are discussed in the next chapter.

During this period, Istanbul faced three major problems: 1) the loss of its capital status along with half of its population, 2) high cost of living and 3) the fragmented and dispersed urban settlement and municipal budget constraints. Municipal resources could not be used efficiently because of the city's fragmented and dispersed structure. The question of how the city should be bounded and governed was debated by various magazine and newspaper writers, prominent statesmen and local and foreign experts. The main reason for the expansion of the urban boundaries was the high cost of living, caused by high rents and food prices. Food prices, tax burdens and local authority control were significantly lower outside the city limits. As a result, some consumers and retailers have chosen to move outside the municipality. Food prices varied widely, not only between different neighborhoods, but also according to the time of day. The high cost of living was also linked to the lack of an adequate mechanism to distribute fruit and vegetables. The construction of a modern and centralized fruit and vegetable market was an attempt to solve this problem. In addition, because the central vegetable market had more control over buying and selling, it had encouraged the arrival of produce from outside the city. Porters carried produce from the vegetable market to different parts of the city. This group played an important role in the food system, increasing the supply of vegetables and helping to reduce the cost of living.

The question of defining the boundaries of Istanbul was a concern not only in the late Ottoman period, but also in the early Republican era. The chapters 3 and 4 discussed how the boundaries of the city changed in relation to various factors such as migration and land taxes. While this chapter too examined expansion of urban boundaries in relation to food production and consumption, differently, it also brought along the expansion of the city beyond its municipal boundaries through transport policies (such as the construction of new railway lines, the reduction of tariffs), efforts to create a national market, and so on. In other words, while the change in scale and scope of Istanbul’s agricultural system during late Ottoman period was

characterized more by the physical boundaries of the city, the changes during the Republican period related to a larger national and economic framework. The national market began to become more integrated with the adoption of technologies and policies that brought distant areas closer together. This is particularly evident in the increased mobility of fresh vegetables, one of the most difficult commodities to transport.

The next chapter turns to the impact of this scaling up of vegetable production and other challenges faced by local producers.

6

No Place for Gardens: Counter Current Against Urban Agriculture

The critical period for the gardens within the municipal boundaries began in the mid–1930s. With the construction of a central market and the reduction of train fares, gardeners who now had to compete with products coming from warmer provinces also faced the hygiene and aesthetic standards implemented by the new regime. All these developments a deepened the rift in urban metabolism.[1] As chronologically as possible, this chapter explores how urban agricultural areas were problematized and excluded from the urban context along with the changing economic, social and political conditions of the time.

§ 6.1 Valiant Gardener Fight Difficulties

The two successive decades, namely the 1910s and the 1920s witnessed a major demographic change. Istanbul's Albanian, Greek and Bulgarian gardeners had either disappeared or been displaced by wars and population exchanges. As part of building a new national identity, the names

1 The concept of metabolic rift refers to the disruption of the cyclical relationship between nature and humans (specifically the food cycle in this chapter) by technological developments and urbanization processes, and is used particularly in urban theory and environmental history.

of the groups who were sent away or excluded through these exchanges were largely erased from urban space. While many street names that defined the space remained unchanged (such as Çukur Bostan Street, Muvakkıthane Street, Nardenk Street, etc.), a large number of street names referring to the ethnic groups living in the area (such as Karabet Kalfa Street, Tensof Street, Demirci Oskiyan Street, Aya Kiryaki Street, etc.) were replaced with Turkish ones.[2] The columnist Hikmet Feridun from the Akşam newspaper sarcastically addressed this issue in his column:

> The city council has made an important decision. They changed the name of the Arnavut (Albanian) village to 'Strawberry village.' They changed the name of the Polonez (Polish) village to 'Cherry village.' Last night, I sat down and came up with names for other villages in Istanbul. After Arnavut village became Strawberry Village and Polonez village became Cherry village, why not call Beykoz '[Paça][3] village' or Eyüp Sultan 'Cream' village? Could we not call Langa 'Cucumber Neighborhood'? Mecidiye village could be 'Mulberry village,' Yedikule could be 'Lettuce village,' and the Circassian (Çerkez) village could be 'Chicken village.' Good heavens, are we in a fruit and vegetable shop?[4]

Traditional naming practices show that Istanbul's famous vegetables and fruits were not imagined separately from the gardeners, carriers of the horticultural knowledge passed down through generations. The waning away of these groups, who were perhaps the most important component of the urban farming system, revealed that richness of products laid not only in the soil but also in the accumulated knowledge. The decline of the city's farming and gardening classes significantly impacted agricultural activities in Istanbul, particularly in vegetable and fruit cultivation.[5]

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2 Erol Ölçer, *Şehir Sokak Hafıza: Kuyulu'da Biçki Yurduna Osman Nuri Ergin ile İstanbul Sokak Adları* (İstanbul: Zeytinburnu Belediyesi Kültür Yayınları, 2014.)

3 Lamp feed soup.

4 Hikmet Feridun, "Yeni Köy İsimlerine Dair," *Akşam*, Nisan 17, 1934, 3.

5 Zühtü, "İdare–i Hususiye: Teşkilinden Belediye ile Tevhidine Kadar Neler Yaptı," 129–139.

The better the vineyard and market garden were tended, the greater the yield. A vineyard neglected for one year due to difficulties would be ten years behind. Being labor–intensive and requiring skill and experience, vegetable growing did not lend itself to industrialization like other branches of agriculture. Before the wars and population exchanges, access to cheap labor was easy due to the presence of large numbers of non–Muslim people engaged in gardening in Istanbul and its surrounding villages. As a result, in the early years of the republic, there was a shortage of labor for vegetable production. According to Şecaat, the agricultural officer in Beykoz, the main reason was that workers who started as beginners wanted a pay rise once they had some experience, and if their demands weren't met they would quit. When workers left their jobs, especially during the summer season, the garden owner suffered great losses. Şecaat suggested that since gardening is a labor–intensive job that requires skilled labor, it is not possible to use machines, and to prevent workers from quitting their jobs, it is necessary to draft and enforce a law that protects the rights of both parties.[6] In addition to labor shortages, gardeners also faced difficulties in securing fertilizer, seeds, energy, water, cash and credit. Horse and sheep manure were the main materials used in the gardens. As this was not enough, cattle manure was also used in many places. According to Hulki, a vegetable specialist, the number of draught animals in Istanbul had been gradually decreasing in recent years, making manure more difficult to obtain. As a result, gardeners have begun to turn to chemical fertilizers.[7] Similarly, Şecaat noted that with the increase in the number of cars[8] and the decrease in the number of animals in Istanbul, gardeners' need for fertilizer is increasing day by day. The manure collected from sources such as slaughter houses and

6 Şecaat, "Sebzeciliğimiz," 9s58.

7 Hulki, "Sebzecilik," 940.

8 In 1933, there were 2,326 motor vehicles in Istanbul. This number reached 10,000 in 1952, 50,000 in 1963, 100,000 in 1971, 250,000 in 1978, 500,000 in 1988 and 1,036,252 in 1996. See. Sedat Murat, İstanbul Külliyatı Cumhuriyet Dönemi İstanbul İstatistikleri 10: Ulaştırma (1933–1996) (İstanbul: İstanbul Büyükşehir Belediyesi Kültür İşleri Daire Başkanlığı, 1998).

military stables, which served as the main supply points, could not meet even a quarter of the total demand. Many gardens operated without fertilizer and their owners suffered losses.[9] According to Necati Şerif, the need for fertilizer in the country has perhaps been felt the most, particularly in the primitive and predominantly vegetable farming sector. [10]

> Today, a cartload of manure mixed with hay and straw costs at least three lire. As the Bosporus gardens are quite extensive, they also require a large amount of fertilizer. To meet this need, there is intense competition between gardeners. According to this calculation, at least a hundred lira worth of fertilizer is needed for an area of one decare.[11]

In his report, Şecaat made several suggestions on how to obtain the fertilizer needed for gardening. One of these suggestions was to use the contents of Istanbul's sewage system by processing it into 'poudrette' for use in gardens. This would provide some of the organic fertilizer needed for gardening.[12] According to agricultural engineer Necati Şerif, the demand for fertilizer was most acute in the country's vegetable sector. He also emphasized that, especially with the increase in transport vehicles (electric trams, cars, etc.) in cities, the amount of livestock and manure is steadily decreasing, making it increasingly difficult to meet the demand for fertilizer for gardening. He also pointed out that the high cost of chemical fertilizer, which is being tried as a substitute for organic fertilizer, and the lack of institutions to guide farmers in its use are major challenges.[13]

Another challenge gardeners faced was getting good quality seeds. Gardeners were much more particular about seeds than farmers. It was common for gardeners to obtain the vegetable seeds they needed from their own crops. Those who did not have seeds would either buy them from nearby gardeners or from shops that sold seeds. These shops were

9 Şecaat, "Sebzeciliğimiz," 957.

10 Necati Şerif, "Sebzecilik," 968.

11 Şecaat, "Sebzeciliğimiz," 957.

12 Ibid., 957.

13 Necati Şerif, "Sebzecilik," 968.

not considered to be very reliable. Gardeners would bring the seeds of certain vegetables from "Europe". For example, in the areas of Tuzla, Pendik, Kartal and Maltepe, where early vegetables were grown, broad bean seeds were brought from Chios every year. As local broad beans ripened later, they were not favored in the early vegetable–growing areas mentioned above. In addition to this, other types of seeds were also brought in from "Europe".[14]

In Istanbul, vegetable production has been divided into three or four regions based on factors such as climate, distance to market and other considerations. According to Şecaat, the agriculture practiced in Kartal–Maltepe, Yedikule–Eyüp and the Bosporus was quite different. In the Bosporus, for example, the difficulty of cultivating large gardens by hand, oxen or horsepower was exploited. The gardens here were ploughed by pairs of animals.[15] The harvest from the gardens was immediately transported to the Istanbul vegetable market by motor vehicles, mostly owned by the gardeners in the neighborhoods where the gardens were located. The produce, which was loaded onto the pier with great difficulty, was transported at a high handling cost.[16]

The cultivation of vegetables was a branch of agriculture that required a considerable amount of water. For this reason, most market gardens had wells. The water from these wells was collected by means of wooden or zinc buckets attached to large wooden garden wheels, which were used to transport the water to pools and then to wooden canals to direct it to the fields to be irrigated. According to Hulki, during the long summer days a pair of oxen attached to these wheels would not be enough to meet the water needs of the vegetables. As a result, gardeners would keep two pairs of animals and rotate them. The advanced version of these wheels was called as the "sakız dolabı". In the "sakız dolabı", which was made entirely of iron, water was drawn through a zinc pipe. These wheels were lighter than the previous ones and did not tire the animals as much. In addition, their prices were relatively lower. Hulki

14 Hulki, "Sebzecilik," 940–941.; Şecaat, "Sebzeciliğimiz," 958–959.

15 Şecaat, "Sebzeciliğimiz," 956.

16 Ibid., 960.

noted that in recent years, gardeners have started to use motorized pumps instead of animal–powered devices to extract water. This technology was particularly evident in the large vegetable gardens near the Alibey and Kağıthane streams and the Bosporus.[17] Some of the gardens with a limited water supply had no choice but to use the municipal water network (Elmalı or Terkos), despite the high cost of this.[18]

The prices of market gardens varied in Istanbul and its surroundings. Gardens close to the city, rich in water resources and with fruit trees were more expensive than those farther from the city and without fruit trees. In Istanbul, the prices of market gardens varied according to the district in which they were located. For example, there were significant differences between the early vegetable–growing region stretching from Pendik to Kadıköy and areas such as the Bosporus region or the districts of Alibey Stream, Topkapı, Yedikule and Bakırköy. Instead of decreasing, the rents for the market gardens increased from year to year. According to Hulki, there were several reasons for this. Some of the existing gardens were run by their owners, while others were leased. The landowners tended to increase the rents for the rented gardens with each new contract period, citing the rising cost of living and high land taxes as an excuse. Gardeners who leased their gardens from the Treasury by open auction or negotiation (on an annual basis) faced the possibility of losing their long–term investment during the renewal period due to competition from a "second" customer. According to Hulki, there was not much that could be done about the price increase in privately owned gardens. However, it was possible to find solutions that satisfied both the gardeners and the Treasury in relation to the state gardens. Landless villagers were given land on an instalment basis. Similarly, market gardens could be leased for several years to those who work in them, with a payment plan that allows for a 5–8 year instalment period based on a predetermined rental fee. This would encourage gardeners to invest in their gardens.[19] Similarly, Şecaat said that selling state–owned market gardens on

17 Hulki, "Sebzecilik," 942–943.

18 Şecaat, "Sebzeciliğimiz," 956–957.

19 Hulki, "Sebzecilik," 947–948.

instalment plans to "occupiers" would contribute to the country's development.[20]

Taxes were another problem for gardeners. Because the market garden land was within the city and its environs, the land tax paid on it was quite high. Under these conditions, garden owners wanted to sell their gardens, preferring to rent rather than own. The council levied separate taxes on the buildings and gardens within the garden area for sanitation and maintenance. A billboard (*tabela*) tax was also levied. The gardeners were charged a storage fee for the baskets they sent to the Istanbul vegetable market. In addition, gardeners had to pay taxes on draft animals such as horses, mules and oxen which they used for ploughing, hauling manure and transporting their produce to market. Imported items such as water pumps, seeds and other equipment from abroad were also added to the tax list. The Export Tax was more indirect than direct, affecting canned vegetables. Thus, the removal of the excise tax on canned goods (a form of value–added tax) was necessary for the development of vegetable farming.[21]

Gardeners were in need of cash or access to suitable credit for the operation of their gardens. Most gardeners obtained the money they needed to cultivate their gardens from middlemen. Middlemen were one of the several intermediaries between vegetable producers and consumers, and perhaps, the most important one. Gardeners mostly obtained the cash needed to plant their gardens from the middlemen in exchange for goods, interest, and commission. There were no local banks that dealt with gardeners. The Agricultural Bank (*Ziraat Bankası*), after lengthy procedures, would offer a small amount of credit (for example, 30 lira) to tenant vegetable growers who had no land of their own, so long as they would find a guarantor. Since most of the local gardens practiced small–scale agriculture, they could not access bank loans and thus had to rely on middlemen for funds.[22] During 1930s' severe cash shortages,

20 Şecaat, "Sebzeciliğimiz," 966.

21 Şecaat, "Sebzeciliğimiz," 965–966.; Hulki, "Sebzecilik," 946.

22 Hulki, "Sebzecilik," 945–946.

middlemen played the role of usurer while providing credits that banks would not extend to garden and field owners.

The middleman, sensing the gardener's urgent need for money, would charge high interest on the money provided, in addition to taking a commission on each basket of vegetables sent. As the vegetables would be sold by the middleman, the gardener could not take his produce to anyone else until the debt was paid. Some middlemen would calculate in advance the commission they would receive on the goods produced by the gardener and add it to the money they would give. Thus, based on the total amount received, they would arrange a promissory note through a notary. In this way, once a gardener became indebted to a middleman, it was very rare for the gardener to ever escape the middleman's debt. In this situation, where the middleman secured many times the amount of money he gave each year, it was also possible for the gardener to lose his garden.[23]

The producer's goods are presented to the consumer after passing through three or four intermediaries. This would mean that three or four parasites would be living off the back of the producer. The gardener only owned the goods until they were sent to the vegetable market. After that, the owner of the goods was the middleman. At that point, the owner of the goods had little power to intervene. The main reason why gardeners found themselves in this difficult situation (interest cycle) was their inability to find cash to cover their needs (fertilizer, etc.) at times when crops were scarce (winter and spring).[24]

Supply and demand were the most important factors in determining vegetable prices. However, the inability to preserve vegetables for long periods, hoarding and speculation by middlemen, etc. caused prices to fall against the gardener. On the other hand, consumers suffered from the difference between the price set in the wholesale market and the prices offered by retailers (shopkeepers, street vendors, etc.). Since the middleman provided both the baskets and the credit to the gardener, the

23 Hulki, "Sebzecilik," 944–945.

24 Şecaat, "Sebzeciliğimiz," 962.

produce brought to market by the gardener was sold under his control. For this reason, the gardener did not know the price at which the goods were sold. Weighers would deliberately under–weigh goods to benefit the middleman. The baskets would be assumed to be heavier than they were, and calculations would be based on this assumption.[25]

The vegetable and fruit–growing gardeners would receive advances from the middlemen before their crops ripened. For instance, a small garden owner in Değirmendere village would take a certain amount of money from the middleman and, when the crop matured, send goods equal to that amount's worth. Middlemen would then sell these crops at high profits. When the goods arrived in Istanbul, the associated expenses (such as municipal duties, transportation costs, weighing fees, storage, handling, etc.) and the middleman's commission would be charged to the gardener's account. Since the gardener (especially the small–scale producer) could not send enough goods to cover both the amount borrowed and all these expenses, they remained continuously indebted to the middleman. The gardener would end up being tied to the same middleman for years to repay their never–ending debts, becoming obliged to accept the terms of the latter.[26] This situation raised the possibility of the garden being taken over (*vefaen ferağ*) under harsh conditions. And gardeners who borrowed from middlemen rarely managed to free themselves from their control. Thus, it was not uncommon for gardeners lose their gardens due to unpaid debts.[27] A garden owner explains the situation as follows:

> There is no institution that grants us credit. We are at the mercy of middlemen in certain sales locations. Most garden owners work for the middlemen. The Agricultural Bank does not provide credit to small garden owners. Recently, [...] we were sharing our grievances at the gardeners' association. Some friends proposed the

25 Necati Şerif, "Sebzecilik," 971–972; Şecaat, "Sebzeciliğimiz," 962–963.

26 "Kabzımallar," *Akşam*, July 7, 1934, 5; Akşamcı, "Kabzımallara Dair," *Akşam*, June 18, 1936, 3.

27 Hulki, "Sebzecilik," 943–945.

> idea of forming a cooperative so that, by coming together, we could obtain credit from the Agricultural Bank. This idea seemed very appealing among friends. However, we could not manage to come together and put this idea into practice.[28]

Middlemen would assume an intermediary role between banks and producers, as well as between producers and those selling fruits and vegetables at retail. Especially small–scale gardeners had to obtain credit from them, as they could not secure it elsewhere. Gardeners producing on a large scale, however, were relatively safe against this mechanism. Cooperatives were also able to avoid indebtedness to these intermediaries because they would charge only a low commission of around five percent on goods from individuals or organizations to whom they did not provide advances. Therefore, for small–scale producers to break free from middlemen, there was an urgent need for a bank providing low–interest loans, which could be established by the municipality to support local gardeners and cooperative formations.[29] However, despite various initiatives, such a credit opportunity did not materialize.

Speculation in the sale of fruits and vegetables did not solely stem from middlemen. Those selling vegetables in shops within the city would delay the purchase of goods from the wholesale market, aiming to buy them at a cheaper rate. As a result, while gardeners suffered losses, shop owners were making substantial profits. Also, a huge gap existed between the prices at the wholesale market and at the shops. An illuminating example from January 1934 showed that vegetables were bought at the market for 20 *para* and were sold in shops for 5 piasters, amounting to a 10–times difference. Such abnormal price distributions were also observed between various districts in the city.[30] Another example was the sudden increase in spinach prices. Spinach that waited for customers at the wholesale market for days ultimately rot and were thrown away.

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28 A. O., "İstanbul Bahçıvanları Müşkül Vaziyette: Adana ve İzmir'den Gelen Turfanda Sebzelerle Rekabet Etmek Güçleşti," *Akşam*, June 15, 1936, 5.

29 "Kabzımallar," *Akşam*, July 7, 1934, 5; "Sebze ve Meyve," *Akşam*, July 11, 1934, 5.

30 "Yüzde Kaç Kar! Sebzecilerde Hiç İnsaf Denilen Şey Yok Mu?," *Akşam*, January 5, 1934, 1.

According to a news report from 7 January 1934, spinach growers from Maltepe and the surrounding areas gave up such enterprise because of speculation and unprofitability, resulting in an abrupt decrease in spinach supply.[31]

Putting local gardeners in a difficult position, such speculative conditions caused many to abandon gardening. Istanbul's gardeners had to borrow from middlemen in order to pay their garden rents. They were also forced to lower prices to compete with the abundant supply of early produce arriving from the warm provinces. On top of that, they had to cover expenses for water, fertilizer, and transportation (boatmen, porters, etc.). Many producers, unable to cover their costs, were forced to leave the business. Eventually, in some of the main vegetable–producing areas of the Istanbul, crops began to be uprooted and discarded by the gardeners.[32]

§ 6.2 Local Gardener vs. Iron Horse

Thanks to the improvement of transportation conditions, large quantities of early–season vegetables and fruits began to be sent to Istanbul from warm provinces such as Adana, Mersin, Tarsus, and Izmir.[33]

> In our childhood and youth, we were not accustomed to eating fresh vegetables in Istanbul during this season [winter]. For some vegetables found in the in–between seasons, they would say they came from Şira or Alexandria. Later on, local varieties appeared. We ate produce from the gardens of Istanbul and its surroundings. So what happened now? Did the climate of the country change, so

31 "Sebze Meselesi: Ispanak Fiyatları Neden Birden Bire Yükseldi? Sebze Halinde Madrabazların Rolü ve Bahçıvanların Vaziyeti," *Akşam*, January 7, 1934, 1.

32 "Sebze Pahalılığı: Belediye İktisat Müdürlüğü Vaziyeti Tetkike Başladı," *Akşam*, July 10, 1939, 3.

33 The early season vegetables sent to the Istanbul vegetable market were usually those that were easy and cheap to transport because they were grown in fields along the railway lines. These vegetables, such as okra, beans, artichokes, onions and potatoes, were more durable than other vegetables such as lettuce, spinach, etc.

> that while snow falls on our streets, spring and summer are blowing in our kitchens? It's actually quite simple: railways were built, and especially the railways began to be operated logically. As one of the first results, the summer produce of Turkish lands began to flood Istanbul in the winter season.[34]

The arrival of early produce from warmer climates like Adana, Mersin, and İzmir also contributed to the decline of Istanbul's agricultural system. Growing vegetables in Istanbul had ceased to be a profitable venture. Istanbul's gardeners could only bring their vegetables to market after early produce from warmer regions arrived and the city's residents had already had their fill. As a result, despite their hard work, gardeners struggled to make ends meet.

> On one of my walks, I met İsmail, a gardener. When all his scattered plots were put together, they amounted to about ten or fifteen decare of land. This man, who spent more than half of his 24–hours day working, mainly grew vegetables and some fruits, and earned barely enough from them to support his large family, especially with regard to caring for his children.[35]

In the past, early vegetables and fruits had come to the Istanbul market from distant provinces, but the quantity was very limited, making early produce a luxurious and expensive delight. Yet the conditions rapidly changed after discounts were applied to train fares.[36] As expressed by Yunus Nadi, the chief editor of Cumhuriyet newspaper:

> The construction of railways and the appropriate tariffs we applied for operating our trains led to an unexpected increase in activities in the country. No need for further words, the regions

34 Akşamcı, "Yaz Sebzeleri," *Akşam*, January 10, 1935, 3.

35 Yunus Nadi, "Memleketin Meslek Mekteplerine Fazla İhtiyacı Vardır," *Cumhuriyet*, February 9, 1938, 1.

36 A. O., "İstanbul Bahçıvanları Müşkül Vaziyette: Adana ve İzmir'den Gelen Turfanda Sebzelerle Rekabet Etmek Güçleşti," *Akşam*, June 15, 1936, 5.

around Adana became the vegetable gardens of Istanbul and Ankara.[37]

The dominant force in the market was not just the vegetable producers of Adana. Cooperative farmers from Izmir were also starting to secure a significant position in the market.[38] A substantial amount of produce was coming from Izmir as well. The large influx of vegetables was putting Istanbul's vegetable growers in a difficult situation. In addition to increased supply from outside, the high cost of living in Istanbul also led to a decrease in the demand for locally produced vegetables. Vegetables were primarily consumed by the broader working–class population, particularly poor families. Thus, despite the popular taste of local vegetables, their relatively high prices led to a shift in demand towards cheaper imported produce.[39]

The producers in the southern coastline regions had several advantages against local gardeners in almost every aspect. Typically, gardeners' expenses consisted of land rent, animals, vegetable and fruit market fees, taxes, costs for seeds, fertilizers, water, transportation, and labor wages.[40] In addition, the southern province had the advantage of a climate that was more favorable and a subsidy for transport costs.[41]

The competition between producers in Istanbul, especially along the Maltepe–Pendik line, which is Istanbul's early season production area, and those in the countryside was an excellent example of the changing times. For example, the Kartal district governorate had taken steps to promote vegetable growing in Istanbul and reduce the impact of competition from the warmer provinces. According to a memorandum written

37 Yunus Nadi, "Başbakan Asıl Bu Hediyeyi Verebilirdi: Köy Kalkınması," *Cumhuriyet*, December 17, 1937, 1.

38 In 1932, the "Izmir and Surrounding Fruit and Vegetable Cooperative Society" was established in Izmir with the aim of increasing fruit and vegetable production and maximising the procurement of products from partners. See. BCA 30.18.1.2– 30/ 58 / 18.

39 A. O., "İstanbul Bahçıvanları Müşkül Vaziyette: Adana ve İzmir'den Gelen Turfanda Sebzelerle Rekabet Etmek Güçleşti," *Akşam*, June 15, 1936, 5.

40 This topic is discussed in detail in Chapter 6.1.

41 This topic is discussed in detail in Chapter 5.8.

to the Prime Minister in 1938, early season vegetable production in the region was in decline because it could not compete with that of the provinces of Adana, Mersin and İzmir. The following actions have been identified by the district governorate: 1) opening of a canning factory 2) establishing of a seed improvement station 3) reducing sulphury and blue vitriol prices in viticulture 4) establishing an agricultural equipment depot and providing farmers with affordable tools 5) founding of an agricultural marketing cooperative 6) encouraging the production of vegetables instead of tobacco, the value of which had declined. However, the making of a national market, one of the projects of the Republican administration, caused distress on the existing organization of the fresh food system. According to an anonymous writer from Cumhuriyet newspaper, although these developments were to the detriment of Istanbul's agricultural sector, it was necessary for the country's development.[42] In other words, the village needed to be a market for industry (i.e., the city), and industry needed to be a market for the village.[43] In this sense, Istanbul was a sizeable market thanks to its dense population, and it should have remained at least as an agricultural market for the nation's development.

> In Turkey, the village is more in need of development than the city. First and foremost, it must be saved. Because in Turkey, the city represents a handful of people, while the village represents the entire nation.[44]

The local producers, especially dairy farmers and gardeners who were weakened in the face of sales cooperatives, had to tighten their belts in order to compete.[45] Conveying the complaints of the local producers,

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42 "Müstahsil için Satış Kooperatifleri Şarttır," *Cumhuriyet*, August 18, 1938, 3.

43 İsmail Hüsrev, "Köyün Hangi Tip Koopereatife İhtiyacı Var?," in *Birinci Ziraat Kongresi: İhtisas Raporları*, vol. 2 (Ankara: Milli İktisat ve Tasarruf Cemiyeti, 1931), 1976

44 "Müstahsil için Satış Kooperatifleri Şarttır," *Cumhuriyet*, August 18, 1938, 3.

45 "İstanbul'un Süt Meselesi Nihayet Hallediliyor Mu? Trakya Sütçüleri İstanbul'a Ucuz Fiyatla Süt Göndermeye Başladılar," *Akşam*, September 22, 1934, 1.; "Sebzeciler: Belediye Bahçe Sahiplerini Korumak İstiyor," *Akşam*, November 20, 1934, 3.; Akşamcı, "Taze Zerzevat," *Akşam*, May 13, 1935, 3.

Yusuf Ziya, the president of the Gardeners and Vegetable Growers Society, tried to find a middle ground by proposing a solution:

> This competition has drastically reduced the prices of fresh vegetables and fruits; however, it is not the city dwellers but the intermediaries who benefit from this cheapness. What is more, especially in winter, the reason for the high cost of living in the city is the high prices of dried vegetables, which are sold at a premium due to their scarcity in the market. However, if external producers were to dry some of the vegetables they bring to the Istanbul market as fresh, both local producers and city dwellers would benefit. Since their climate is more favorable, they prefer to sell early produce. This is why our producers are on the verge of bankruptcy. […] To slightly improve the situation, a small tax should be levied on fresh fruits and vegetables imported from outside the city. This tax would also generate income for the city.[46]

Under these conditions, the gardeners were demanding a new tax, similar to the "octrova" tax that had once been imposed on fresh vegetables and fruits coming from Anatolia, to be applied once again. In the past, municipalities used to impose high taxes on goods coming from outside to protect the products within their own borders. Regarding this issue, one gardener said:

> After the train tariffs were significantly reduced, Mersin, Adana, and Tarsus fully switched to vegetable farming. The vegetables coming from these places to Istanbul are cheaper than taking a locally grown vegetable to the market in Istanbul.[47] (Figure 6.1).

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46 "Sebze ve Meyvacılar Fena Vaziyete Düştüler: Anadolu'dan Gelen Sebze ve Meyvalardan Resim Alınmasını İstiyorlari," *Cumhuriyet*, July 8, 1932, 4.

47 "Bu Sene İstanbul'da Sebze Neden Çok Pahalı? İki Mühim Sebep: 1- Hastalık 2- Bahçıvanların Parasız Kalmaları," *Akşam*, June 14, 1935, 1.



Figure 6.1 "Why are vegetables so expensive in Istanbul this year? 1) Diseases 2) Gardeners running out of money." SOURCE: *Akşam* (June 14, 1935).

However, according to H.A., a columnist for Akşam Newspaper, the Ministry of Interior had abolished this tax, which dated back to the feudal period, to ensure creating a national economy and a single market in the country. Under these conditions, the practice of protect each city's local traders against competition would disrupt the desired economic unity, so

it was not possible to patronize local traders or gardeners. The one who brought the cheapest goods to the market first should be the one to benefit. If efforts were made to protect Istanbul's vegetable growers, then it would strike a blow to the vegetable farming in Adana. Therefore, the task of Istanbul's gardeners was to grow their capital by forming companies or opening cooperatives through uniting neighborhood by neighborhood.[48]

There were also those who believed that Istanbul's gardeners could not keep up with the times and were insufficient in adapting to the changing conditions, in other words, they did not know how to change:

> The gardeners of Istanbul have accepted this situation with great resignation for years, and they have not followed a path to improve their condition in a way that would meet the requirements of the current necessity.[49]

§ 6.3 Cleaning the City Out from "Germ–Breeding Grounds"

Immediately after the foundation of the Republic, a nationwide health mobilization program was initiated, particularly to eradicate epidemic diseases such as typhoid, cholera, and malaria.[50] The biggest issue for public health was the sanitation of cities, including sewage management, water and air purification, and waste removal, as well as access to healthy and clean food.[51] To that end, sanitary measures began to be implemented in areas such as food production facilities, barns and stables, waterworks, and sewage system. Municipalities were held responsible for the investment and efficiency of such infrastructure; spanning from

48 H.A., "İstanbul'da Sebzecilik Ortadan Kalkıyormuş: Bostan Sahipleri Adana ve İzmir'in Rekabetinden Şikâyet Ediyorlar," *Akşam*, July 3, 1937, 5.

49 F. G. "Değişmeyi Bilmeyenler," *Cumhuriyet*, June 2, 1938, 5.

50 The hygiene situation in Istanbul became a significant concern for administrators, particularly from the late nineteenth century onward. For a comprehensive study, see. Yeter Can Gümüş, The Politics of Hygiene: Public Health and Urban Transformation in Late Ottoman Istanbul (PhD diss., Boğaziçi University, Istanbul, 2025).

51 Ali Suat, "Hıfzı Sıhhat ve Sıhhati Umumiye," 307–310.

slaughterhouse construction to building cemetery facilities, from food and water inspection to draining swampy lands.

In 1933, the Public Health Law (*Umumi Hıfzıssıhha Kanunu*) was enacted, which provided the legal foundation for the measures needed to be taken regarding health and hygiene in urban areas. According to the law, it was prohibited to discharge contaminated water into rivers and streams without treatment. Sewage channels built or to be built by municipalities could not be discharged into streams, creeks, and rivers. Additionally, human feces could not be used as fertilizer in the cultivation of vegetables and other crops, a practice that had been common among gardeners who believed this as a cheap and efficient way of boosting production.[52] In cities with a population of over twenty thousand, it was forbidden to have animal stables on main streets and within settlement areas. Opening workshops that violated the health and comfort of urban residents was also prohibited. The law foresaw the eradication of pests and animals that transmitted diseases when epidemics spread through various means. It also prohibited the production and consumption of foodstuffs that caused diseases, as well as the use of water from suspicious sources.[53] Thus, issues such as food production and animal husbandry within the city turned into a question from a public health perspective. In this sense, the market gardens, which were the "workshops" of the city associated with water, began to be problematized as urban production units.

It is safe to assume that not everyone fully complied with the rules written in the laws and regulations. For instance, regulations issued during the Republican period banned poultry and livestock from being allowed to roam the streets and squares. However, investigations conducted by inspectors revealed that this ban was not observed in many parts of the city, and some shops were found to be raising chickens and similar animals in the streets. In fact, in some neighborhoods, even

52 As explained in Chapter 1, the use of human feces as fertilizer has been common since ancient times.

53 The Public Health Law (Umum–u Hıfz–ı Sıhha Kanunu) Article 242, 244, 245, 246, 268.

livestock was seen wandering between districts and grazing on vacant lots.[54] The regulation of food production began primarily with efforts to regulate the city's stables and milk supply. The issue of ensuring that Istanbul residents could consume suitable and healthy milk had been a concern for some time. Since the late nineteenth–century, numerous writings had been published and regulations enacted regarding the current state of cow stables and how they should be organized.[55] As a result of the tightening enforcement of sanitary regulations throughout the 1930s, most cow owners began relocating their animals outside the municipal boundaries to avoid the burden of rebuilding their stables in compliance with the regulations. Since transportation costs would now be included in the price of milk, expectations of inflation became an issue. This led to fears of a potential milk crisis.[56]

As early as 15 July 1930, Milk Producers Society gathered a meeting on the topic. The outcome was a request of assistance from the Municipality as their financial situation did not allow them to build sanitary stables. In the petition prepared, the following items came to the fore: (1) extension of the deadline for regulating the stables within the municipal boundaries, and (2) construction of stables by the Municipality to be rented to producers or sold to them in installments.[57] However, the municipality was not in favor of constructing stables, which would cost approximately 1 million liras.[58] To facilitate the implantation of the law, the Municipality, divided the stables into two categories: those that could not be improved, and those that could be renovated. The first group would be closed directly, while the second group, which had not been improved within the given timeframe, would not be closed for the first time but rather their owners would be fined. If the owners of these stables resisted improving

54 "Belediye Tamimleri," *İştanbul Belediye Mecmuası*, no. 93 (May 1932): 347–352.

55 Ruhat Alp, *Bakraçtan Şirkete: Osmanlı İmparatorluğu'nun Süt ile İmtihanı (19. Yüzyılın Son Çeyreğinden 20. Yüzyıla)* (İstanbul: Libra Yayınları, 2019).

56 "İnekçiler: İstanbul Haricine Çıkacaklar Mı?," *Cumhuriyet*, June 21, 1930, 2.

57 "Sütçüler Cemiyeti Neler İsteyecek? Ahırları Ya Emanet Yaptırmalı, Yahut 3 Sene Mühlet Verilmeli!..," *Cumhuriyet*, July 16, 1930, 2.

58 "Asri Ahırlar: İnekçilerin Teklifi Kabul Edilmiyor," *Cumhuriyet*, July 17, 1930, 2.

them, these stables would also be closed.[59] As a result of the Municipality's persistence and efforts, sanitary stables were constructed to accommodate a total of 2,000 animals. Stable owners with 30 or more cows were not only cooperative with the municipality's measures but were, in fact, pleased with them, reporting an increase in milk production after the installation of the sanitary stables. However, small–scale operators with only a few cows, who struggled to afford the costs of modern stables, were dissatisfied with the novel obligations. Despite their complaints, the Municipality insisted that it could neither abandon this significant initiative nor alter the regulations, which affected the entire region, for the sake of a few small dairy farmers. Instead, it advised small–scale producers to unite.[60]

The Municipality of Istanbul's directive on modernizing stables primarily focused on the technical aspects, such as securing required dimensions (width, height, design, etc.) and other standards. Yet despite meeting these sanitary standards, both the stables and dairies continued to negatively impact the health and comfort of the city's residents.[61] For instance, the waste (manure, etc.) produced by the stables posed a significant threat for the peace and cleanliness of the city. Although some stables had been modernized according to the regulations, these measures failed to prevent the accumulation of manure in various areas, which consequently disturbed the residents of the surrounding neighborhoods. As a result, the public expressed extreme dissatisfaction with the manure piles in both the stables within the city and on the streets. In response to the growing concern, the Municipality issued an order to be applicable immediately, prohibiting dairy farmers from piling manure in open spaces and mandating them to store the waste in enclosed areas to

59 "Asri Ahırlar: Şehremaneti Bazı Kararlar Verdi, Kabili Islah Olmayan Ahırlar Hemen Kapatılacaktır," *Cumhuriyet*, July 25, 1930, 3.

60 "Asri Süt Fabrikası!.. Sütçüler Zengin Bir Macar Grup ile Müzakereye Giriştiler," *Cumhuriyet*, May 27, 1931, 1.

61 "İnek Ahırları: Boğaziçililer Mahalle Arasındaki Ahırlardan Şikayetçi," *Akşam*, March 25, 1936, 3.

mitigate the disturbance to urban life.[62] On the other hand, the residents were just as dissatisfied with the horse stables as they were with the those for cows. The horse stables were primarily concentrated in the Aksaray area, where locals complained about the foul odor that permeated the entire neighborhood due to the accumulation of manure in the nearby stables.[63] In addition, the piles of manure attracted and bred black flies, which posed a threat to public health.[64] Considering the sanitary concerns within the urban area, the Municipality decided to gradually move the animal stables outside the city. The first step was to relocate the stables directly owned by the Municipality.[65] By the end of the 1930s, it was decided that no stables would remain within the municipal boundaries, and that they would be relocated to suitable areas outside the city according to a planned strategy.[66]

Although not as large as the cattle, the flies of the city were perhaps even more nauseating for the residents. Efforts to drain water accumulations such as wells and cisterns, which harbored mosquitoes responsible for diseases like malaria, were also ongoing in Istanbul. Although malaria was generally associated with rural areas, it was also present in Istanbul. This condition, prevalent in the 1930s, appear as a significant indication of the blurring lines between the "urban" and "rural" aspects of the city. A columnist's complaints are illuminating:

> When malaria is mentioned, one thinks of swamps covered with reeds, uninhabitable empty lands, and finally, villages. But how can you associate malaria with Istanbul, which is the legacy of

62 "İnek Ahırları: Gübreleri Etrafa Atanlar Cezalandırılacak," *Akşam*, July 28, 1935, 3; "Ahır Gübreleri: Gübreleri Açıkta Bırakanlar Ceze Görecek," *Akşam*, May 13, 1935, 3.

63 "Beygir Ahırları: Aksaray Halkı Pislikten Şikayet Ediyor," *Akşam*, March 26, 1936, 3.

64 "Belediye Tamimleri," *İstanbul Belediye Mecmuası*, no. 149–153, (May 1937): 623.

65 "İnek Ahırları: Tadil Edilmeyen Üç Ahır İle Bir Mandıra Kapatıldı," *Akşam*, January 1, 1934, 3.

66 "Ahırların Nakli: Belediyede Bir Toplantı Yapıldı," *Akşam*, February 23, 1939, 3.

> history, the most populous city in Turkey, and one of the most beautiful centers in the world? Well, we have managed to do that too.[67]

The fight against malaria in Istanbul province had been initiated in 1929 between Kadıköy and Pendik districts of the Anatolian side by the Provincial Health Directorate (*Vilayet Sıhhiye Müdüriyeti*) and the Municipality of Istanbul.[68] This region was one of the largest fly control areas in the world.[69] The presence of more than ten mosquito species in Istanbul and its surroundings led to the use of unique methods in the fight. According to a report from 22 November 1932, over 10,000 houses, including their gardens, vineyards, fields, vacant lots, cisterns, market garden wells, ordinary wells, wet pits, dry and permanent streams, brooks, and sewers, had been cleared of mosquitoes since 1929. The efforts yielded productive results at certain regions, leading to increased interest and construction of new buildings.[70]

Despite intensive efforts, the mosquito and malaria problem had not been fully resolved. To completely eliminate the mosquitos, septic pits (cesspools) dug in the gardens of summer houses needed to be improved scientifically. This was because although mosquito larvae could typically be found in large stagnant waters across rural landscapes, they would also nest in bodies of water such as pools, pits, muddy ground, wells, cisterns, creek beds, and similar places in urban areas. Therefore, the problem was concerned not only the peripheral districts but also those that consisted the city center including Taksim, Nişantaşı, Şişli, Beşiktaş, and Üsküdar.[71] If the mosquito–breeding sites were not improved, malaria

67 "İstanbul'da Sıtma," *Akşam*, November 11, 1936, 3.

68 "Sivrisinek Mücadelesi," *Cumhuriyet*, March 18, 1929, 2.

69 "Memlekette Sıtma Mücadelesine Hareretle Devam Ediliyor: Kadıköy ve Havalisi Sivrisinekten Kurtuldu," *Cumhuriyet*, June 13, 1929, 2.

70 "Sıtma Mücadelesi: Dört Senede Alınan Neticeler Çok İyidir," *Cumhuriyet*, November 22, 1932.

71 "Şehirde Sivrisinek Mücadelesine Başlanıyor," *Akşam*, August 2, 1939, 1.

would persist.[72] Consequently, to rid all of Istanbul of this nuisance, the scope of mosquito control efforts needed to be expanded.[73] However, the extermination program was progressing very slowly, especially at the central districts. The main reason for this was the insufficiency of laborers, technical staff, and necessary tools to completely eliminate the larvae and close all breeding grounds.[74] Although insufficiency of pest–control resources was an obstruction, a more fundamental problem was inadequate infrastructure. The large portion of water usage for both homes and gardens was supplied through wells. Hence the clear statements in regulations regarding the construction of wells and the impermeability of their walls. To name a few exemplary items, for instance, wells were to be kept permanently clean; they were to be cleaned and disinfected in response to any complaints; old and forbidden wells were to be closed and filled; the mouths of cisterns were to be sealed.[75]

Another disease in Istanbul that was as troublesome as malaria was typhoid. Categorically, while malaria was more commonly observed in rural areas, typhoid was more prevalent in the urban centers where the population was denser. The common factor among these infectious diseases (typhoid, cholera, malaria, etc.) was their association with contaminated water sources. Typhoid Bacillus was typically found in areas with impure water and irregular sewage systems. This was a very resilient bacteria, able to survive for months in human feces, dry soil, stagnant water, or even ice, and could even multiply under unfavorable conditions. The spread and proliferation of the disease were often caused by the contamination of streams, wells, and spring waters with the feces of a typhoid patient, and these polluted waters coming into contact with

72 "Sıtma Mücadelesi: Dört Senede Alınan Neticeler Çok İyidir," *Cumhuriyet*, November 22, 1932.

73 Akşamcı, "Sivrisinek Mücadelesi: Sıhhiye Müdürlüğü, Vesait ve Kadronun Kafi Gelmediğini Bildirdi," *Akşam*, July 26, 1936, 3.

74 "Sivrisinek Mücadelesi," *Akşam*, 10 August 1939, 4; "Sivrisinek Mücadelesi: Bostanlardaki Mecralara Mazot Dökülüyor," *Akşam*, August 14, 1939, 3.

75 İ. H., "Şehrin Planı ve Temizliği," *İstanbul Belediye Mecmuası*, no. 92, (April 1932): 336–341.

foodstuffs like vegetables and fruits.[76] In Istanbul, due to the lack of sewage systems and the scarcity of clean drinking water, typhoid was constantly present.[77] With the arrival of summer, the increase in the sale of green vegetables and raw foodstuffs, which were sold uncovered and eaten raw, contributed to the spread of germs and the occurrence of diseases. The conditions worsened over the 1930s to the extent that in the Spring of 1937, the city underwent an epidemic. Dr. Emin Kıcıman, a famous doctor, warned the people of Istanbul during the outbreak not to eat or drink anything raw, unpeeled, or uncooked.[78] To eliminate the outbreak, patients needed to be quarantined, sewage systems contained, and the use of human feces as fertilizer in vegetable gardens prevented.[79] Newspapers from the time were saturated with articles about the relationship between market gardens and typhoid in Istanbul. As a matter of fact, such complaints and debates about sanity and public health have been heating up since 1935 and reached their peak during the outbreak of 1937. Step by step, these developments laid the grounds to the idea of removing the gardens within the municipal boundaries.

In Summer 1935, the occurrence of typhoid was argued to stem from the improper sewage system. Since May, specific neighborhoods where population density was high were particularly affected. It was highlighted that through the valley encompassing Şişli, Nişantaşı, and Beşiktaş, wastewater from residential areas and hospitals was discharged directly into the streams passing through vegetable gardens.[80] (Figure 6.2) The vegetable gardens within crowded neighborhoods became usual suspects for hosting epidemics as they were closely linked with water sources such as wells and streams. This was due to accidental seepage

76 Emin Kıcıman, "İstanbul'da Tifo Hastalığı ile Mücadele," *İstanbul Belediye Mecmuası*, no. 149–153 (May 1937): 599–600.

77 "Tifoya Karşı Ne Yapıyorsunuz? Dr. Osman Şerafettin Bey'in Vesayası," *Cumhuriyet*, February 24, 1931, 1.

78 Emin Kıcıman, "İstanbul'da Tifo Hastalığı ile Mücadele," 599–600.

79 Emin Kıcıman, "Bulaşıcı Hastalıklar," *İstanbul Belediye Mecmuası*, no. 166–168 (August 1938): 872–877.

80 Suad Derviş, "Lağım Suları ile Sulanan Bostanlar," *Cumhuriyet*, June 28, 1935, 1.

and irrigation with sewage water flowing openly to be utilized as fertilizer.[81] Upon the continuation of such practices by garden owners despite the warnings from authorities, a decree was issued by the Municipal Council on 12 June 1935[82] and announced in newspapers. According to this, irrigation with sewage water or using sewage content as fertilizer were prohibited. Gardens of those who did not comply with the rule would be closed and their vegetables confiscated.[83] In the following months, an official letter sent to newspapers by the Istanbul Health and Social Assistance Directorate (İstanbul Sıhhiye ve Muavenet–i İçtimaiye Direktörlüğü) on 2 August 1935, outlined the necessary steps to ensure cleanliness in gardens as follows: (1) Property owners in neighborhoods without sewer systems were notified to have septic pits constructed on their premises. Until these pits were constructed, occupancy permits or rental licenses would not be issued. (2) An addition was made to the municipal budget this year to acquire a suction truck to collect and remove the contents of septic pits. (3) The Municipal Council's decree regarding garden owners who continued to irrigate with sewage water would be enforced.[84]

81 "Tifonun Kökü Kazınacak: Açıkta Akan Lağımlar Kapatılacak," *Akşam*, August 23, 1935, 1.

82 Istanbul Metropolitan Archive, The Municipal Council report no. 40693 (12.06.1935).

83 "Belediye Tamimleri," İstanbul Belediye Mecmuası, no. 129–130 (May–June 1935): 427–428; "Bostanlar Lağım Suları ile Sulanmayacak," Cumhuriyet, June 13, 1935, 2.

84 "Lağım Suları ile Sulanan Bostanlar," *Cumhuriyet*, August 3, 1935, 3.

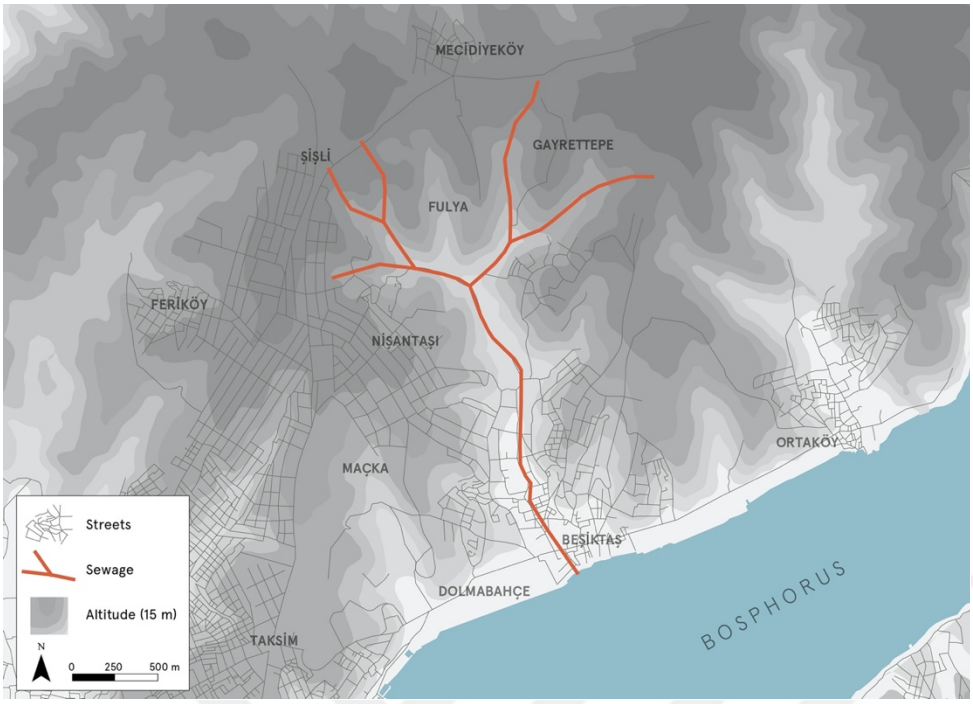


Figure 6.2 The valley that includes Şişli, Nişantaşı, and Beşiktaş and wastewater from residential areas.

August 1935 witnessed strict inspections to ensure the enforcement of the decisions. As a result, it was observed that the garden owners in Üsküdar's Bülbülderesi and Şeyh Mosque areas, as well as in the Atpazarı neighborhood, had long been diverting *mecra*s (sewage mixed with stream water) coming from Bağlarbaşı, Selamsız, İcadiye, and Yenimahalle to their gardens. Reports were prepared against the relevant garden owners and submitted to the Üsküdar district governorship.[85] Yet there were still gardeners resisting to the decree. In the following days, a complaint letter sent to the newspaper by Akif Bey, a resident of Çavuşdere Street in Üsküdar, indicating that the issue had not yet been resolved.

> The market gardens belonging to Osman and Kazım in our neighborhood are irrigated with sewage water. Because of this, we can't find relief from the foul smell and mosquitoes. We have applied to

85 "Bostanlarını Lağım Suları ile Sulayanlar Cezalandırıldı," *Cumhuriyet*, August 8, 1935, 2.; "Lağımla Sulanan Üsküdar Bostanları," *Cumhuriyet*, August 13, 1935, 6.

> the Üsküdar Governorate many times, but it was of no use. I kindly request your permission to voice our complaint through your esteemed newspaper.[86]

The Beyoğlu Governorate also conducted inspections in the gardens between Harbiye School and Maçka. Fines were imposed on certain gardeners for not complying with the directive. Despite the fines, when the garden owners continued to irrigate their vegetables with sewage water, all vegetables in these gardens were confiscated and destroyed in accordance with the provisions of the directive.[87] However, in a letter sent to the Governorate, the Provincial Health Directorate (Vilayet Sıhhiye Müdürlüğü) mentioned that the measures taken had not been effective, and that some "cunning" gardeners continued to exploit these *mecra*s. The directorate requested that a more radical decision be made by the Municipal Council regarding this issue, which posed significant risks to public health.[88] Dissatisfied with the results, the Municipal Council reconvened on 12 November 1935. As an outcome of the meeting, a new directive prepared by the Municipal Committee (Belediye Encümeni) was approved.[89] In the meeting, the responsibility of confiscating the crops of gardens irrigated with sewage water was assigned to the Municipality. The Municipality reasserted an extensive inspection program to identify all such gardens. The goal was to ensure that no market gardens in Istanbul would be irrigated with sewage water by the end of November (1935).[90]

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86 "Üsküdarda Lağım Suları ile Sulanan Bostanlar Varmış," *Cumhuriyet*, September 21, 1935, 9.

87 "Lağım Suları ile Sulanan Sebzeler: Beyoğlu İlçebayı Hepsini İmha Ettirdi," *Cumhuriyet*, September 26, 1935, 2.

88 "Lağım Suları: Şehir Meclisinden Şiddetli Karar Bekleniyor," *Cumhuriyet*, September 25, 1935.

89 "Bostanlar: Lağım Suyu ile Sulanması Yasak Edildi," *Akşam*, November 13, 1935, 5.; "Lağımla Bostan Sulamak Yasak! Şehir Meclisi Bir Talimatname Kabul Etti," *Cumhuriyet*, November 13, 1935, 2.

90 "Pis Bostanlar: Lağım Suları ile Sulanan Bostanlar Tesbit Ediliyor," *Akşam*, November 19, 1935, 3.

Soon, it turned into a passive resistance as garden owners continued to insist on and showcase their skills in using polluted water. For example, when investigating the cause of sewage flooding in the Keçeciler neighborhood in Topkapı, the Municipality's Technical Committee discovered that a garden owner had blocked the mouths of the sewers running through the neighborhood to divert the sewage water to his market garden. When heavy rain occurred, the blocked sewers overflowed, flooding the neighborhood with sewage. As a result, the crops in the garden were destroyed, and the area was quarantined until clean water could be supplied.[91] Sometimes, even after such sanctions, it was observed that some garden owners began agricultural activities again in their sealed gardens secretly.[92] In some cases, despite the municipality closing the sewers, garden owners would irrigate their gardens with sewage water by drilling holes in the pipes.[93] Municipal officials were also held responsible for such tricks. If, during inspections, it was discovered that a garden was irrigated with sewage water in any area, the relevant officials of the respective municipal department would be severely punished for being negligent or for turning a blind eye due to bribery.[94] This game of cat and mouse continued until the typhoid outbreak during the Spring of 1937.

At this point, the public debates went beyond the resisting gardeners or enabling officials who turned a blind eye to them. The need for overall improvement was often emphasized. According to experts, the solutions for typhoid consisted of the following articles. (1) Completing the city's sewer system. (2) Ensuring that all clean water passed through clean pipes. (3) Closing not only the market gardens irrigated with sewage water but even those whose water sources were questionable. (4) Disallowing gardens and market gardens adjacent to residential houses to be

91 "Bostancının Marifeti: Bütün Bir Mahalleyi Lağım Suları Altında Bırakmış!," *Akşam*, February 11, 1936, 3.

92 "Nasıl Açılmışlar? Lağım Suları ile Sulanan Bostanlar Tedkik Ediliyor," *Akşam*, August 7, 1939, 3.

93 "Tifoya Karşı Bostanlardan Geçen Lağımlar Kapatılacak," *Akşam*, December 1, 1934, 3.

94 "Bostanlar: Lağım Suları ile Sulananlardan Belediyenin Alakalı Memurları Mesul Tutulacaklar," *Akşam*, February 13, 1936, 3.

operated within 15 meters of the house. (5) Constructing a wall at least 1.80 meters high around the gardens that were adjacent to streets and not separated by a wall. This was considered a very important measure by experts. For instance, in Aksaray, there were large gardens next to Mustafa Kemal Street. The microbes from street dust, mixed with saliva and other substances, would invade these gardens with a light breeze. These dust particles posed a constant danger to vegetables, such as lettuce, cucumber, and radishes, which were consumed raw. (6) Preventing street water and floods from flowing into the gardens and stopping the public from treating the gardens as recreational areas, entering them, and causing damage. This was an unusual proposal, as it conflicted with Istanbul's old tradition of using gardens as places of recreation. (7) Preventing gardeners from washing the crops that were eaten raw in small stagnant pools known as "havuz," as these pools often contained dirt and microbes, which would stick to the fresh vegetables.[95] (Figure 6.3)

95 Murad Sertoğlu, "Tifoya Karşı Harb: Hemen Bütün Bostanlar Birer Mikrop Yuvasıdır," *Cumhuriyet*, June 25, 1937, 1.



Londra 24 (Hususi) — Hariciye Na- ademi müdahale komitesi ve bizzat ade-

Tifoya karşı harb

Hemen bütün bostanlar birer mikrob yuvasıdır

İstanbulda pis sarnıç sularını Hamidiye diye satan sucular mı var?

Dr. Rüştü Çapçı, Dr. Süreyya Hidayet ve kimyager İbrahim Etemin anketimize verdiği cevablar

En çalışkan ve en cevval doktor adına hakikaten lâyık olan Cerrahpaşa hastanesinin direktörü Dr. Rüştü Çapçı bir taraftan suallerime cevab verirken bir taraftan da mütemadiyen odaya giren ve çıkanların dileklerini dinliyor, kâğıdlarını imzalıyordu:

Cerrahpaşa hastanesi direktörü Dr. Rüştü

«— Tifonun tamamen izalesi çarelerini mi soruyorsun; işte benim aklıma gelenler:

1 — Şehir kanalizasyonunu tamamlamak,

2 — İçilen bütün suları demir borulardan geçirmek,

3 — Lâğım sularile sulanan bostanları değil, hatta lâğım sularının geçmesi şüpheli olan bostanları bile kapamak,

4 — Meskûn olan evlere bitişik bahçe ve bostanları evlerden 15 metro mesafeye kadar işletmemek,

5 — Sokak ve caddelere mücavir olup duvarla ayrılmamış bostanlara asgarî 1,80 metro irtifaında duvar çekmek. Bilhassa bu mesele çok mühimdir. Meselâ Aksarayda Mustafakemalpaşa caddesinin yanında büyük bostanlar var. Tükrük ve sair vasıtalarla caddedeki tozlara karışan milyon ve milyarlarca mikrob hafif bir rüzgârla bu bostanları istilâ etmektedir. Bu tozlar, haydi kaynatılarak yenen sebzeleri haric tutalım, fakat marul gibi, turp gibi, soğan gibi çiy olarak yenen sebzeler için her zaman çok büyük bir tehlikedir,

6 — Sokak sularının ve sellerinin bostanlara gitmesine mâni olmak ve halkın bostanları mesire addederek girmesine ve

Murad Sertoğlu

[Arkası Sa. 5 sütun 1 de]

Figure 6.3 "Almost every garden is a germ breeding grounds." SOURCE: *Akşam* (June 25, 1937).

Besides experts, influential public intellectuals too were keen on implementation of urgent measures. According to Yunus Nadi, the chief editor of Cumhuriyet newspaper, it was urgent to get rid of typhoid immediately, and waiting for the completion of the sewer system or the development of an urban plan could be too late. Viewing the situation as a matter of national dignity, the writer expressed his feelings as follows:

> The persistence of typhoid in Istanbul is a grave shame for Turkishness. We invite the authorities and the people of Istanbul to an all–out–struggle to eradicate this disease from our country.[96]

The famous writer and columnist Peyami Safa also shared similar sentiments with Nadi in his column:

> Throughout its history, among the countless and terrifying enemy hordes that the Turkish nation has defeated, it is a painful and surprising contradiction that it is powerless against the microbes of a disease like typhoid. This is a situation that should have made us sick with shame before the affliction itself, given that science had long since found preventive remedies.[97]

In a sense, the Summer 1937 became a turning point for the fate of the gardens. By June, typhoid cases were significantly increased, with 8–10 cases being reported daily, and the disease had reached epidemic proportions. For this reason, new measures to eradicate the disease at its root, in a more radical manner, had once again come to the forefront. According to this; (1) All the wells in market gardens had to be completely removed and a Terkos (clean water) system be installed instead, (2) The water channels of Halkalı and Kırkçeşme should be repaired and improved, (3) The mixing of sewage and rainwater flowing openly in the outskirts of Istanbul should be prevented, (4) The municipal markets (bazaars) should be improved, and (5) The general cleanliness of the city

96 Yunus Nadi, "İstanbul'da Tifoyu Kökünden Söküp Atmak Kabil Değil Midir?," *Cumhuriyet*, June 19, 1937, 1.

97 Peyami Safa, "En Büyük Hastalığımız," *Cumhuriyet*, June 20, 1937, 3.

should be ensured.[98] According to these measures, even the use of well water in the gardens was now considered problematic, and garden owners were obliged to use clean water. However, in the absence of a budget for building a proper sewer system, closing or exiling the vegetable gardens altogether emerged as a radical option. A popular columnist with the nickname Akşamcı wrote:

> In Istanbul, epidemics, especially typhoid, are never absent. The concept of cleanliness in the municipality belongs to an era before microbes were discovered. No matter how much the current sanitation system is strengthened, it is useless; the structure of the city is flawed. The city itself harbors nests of microbes: the market gardens... The source of Istanbul's epidemics is the market gardens. These gardens, which grow vegetables like lettuce, salad, and others consumed by the public, are devoid of the most basic health principles. The streets are filled with dust and soil, contaminated with every kind of microbe, and this dirt ends up in the gardens. Sewage often flows from the gardens, and these dirty waters are used there. Around the world, vegetables are grown in villages near cities. As Istanbul expanded, the gardens that were once outside the city have now become part of it, turning into nests of filth.[99]

As the epidemic spread, ordinary city residents also began voicing their complaints about the necessity of the removal or strict supervision of the market gardens. Kazım Bey, who lived on Hanımefendi Street in Şişli, expressed his feelings and thoughts in a letter he sent to Cumhuriyet newspaper as follows:

> I reside on Hanımefendi Street in Şişli. At the end of our street, there are fields and market gardens. And the street's sewage flows openly into these fields and gardens. This situation has persisted since the establishment of the street. You write that the

98 "Şehirde Dün Altı Tifo Vakası Daha Tesbit Edildi," *Akşam*, June 27, 1937, 3.

99 Akşamcı, "Şehrin İçinde Mikrop Yuvaları," *Akşam*, June 26, 1937, 3.

> municipality has launched a vigorous campaign on this matter. We read the same articles last year. But so far, the only people who have come to our street are the municipality's tax collectors. We have not seen a single person concerned with sanitation or health matters. Today, we cannot sit because of the mosquitoes. The smell is another issue. The danger of typhoid keeps us awake.[100]

Former Mayor (*şehremini*) Cemil Topuzlu was also in favor of removing the market gardens within the municipal boundaries. In his interview with Akşam newspaper, he highlighted two important points in the fight against typhoid: creating new clean water sources aside from the Terkos water and removing the vegetable gardens within the city. Giving examples from European cities, he argued that a single clean water source should be used for daily use, drinking, and irrigation. According to Topuzlu, waiting years to build a modern sewer system to combat typhoid meant indefinitely postponing the issue. Constructing a complete, modern sewer system throughout Istanbul would take years and require at least 50–60 million liras. Securing this amount and completing the sewer construction in a short time was unlikely. There were many incomplete, faulty, and open sewage systems across Istanbul.[101] Up until 1937, the construction undertaken had met only about 10% of the city's needs.[102] Therefore, less costly and faster solutions were needed. If all wells (including garden wells, cisterns, etc.) were closed, market gardens would have to be irrigated with clean water, city waters would improve, and measures could be taken more efficiently to ensure the cleanliness of fruits and vegetables. This would result in reducing flies and thus typhoid cases could be eliminated by the following year. However, city water should be sold to garden owners at an affordable price to prevent water

100 "Bostanlara Akan Lağımlar," *Cumhuriyet*, July 13, 1937, 2.

101 "Tifo ile Mücadelede İki Mühim Nokta: 1) Terkostan Başka Suları da Temizlemek, 2) Şehir İçinden Bostanları Kaldırmak," *Akşam*, June 28, 1937, 1.

102 "Beş Yıllık Mesai Programı: Belediye İşleri," İstanbul Belediye Mecmuası, no. 149–153 (May 1937): 538.

supply shortages and return to sewage water use. In case the measures did not succeed, the alternative was to uproot the gardens completely:

> In no other country in the world are there market gardens in the very heart of the city as there are in Istanbul. Therefore, all these gardens should be moved outside the city, and parks and gardens should be created in their place.[103]

Indeed, the existing measures were not very promising eradicating typhoid. The idea of relocating the gardens, which was coming to be considered the primary source of the issue, outside the municipal boundaries gained more attraction. However, such proposals had yet to gain the Municipality's approval. The Municipality did not want to rush into a decision on this matter, which was closely tied to the city's economic conditions.[104]

By July 1937, typhoid cases had risen significantly, with 37 cases reported within 48 hours. The Municipal Health Directorate (Belediye Sıhhiye Müdürlüğü) began inspecting all cisterns and wells throughout the city, closing down those deemed highly contaminated and generally unsanitary. Not only public and garden wells but also cisterns and wells in private homes and gardens were subject to this inspection now.[105] The increase in typhoid cases and public pressure were forcing the municipality to take more radical actions regarding the market gardens, which were considered "germ–breeding grounds" (*mikrop yuvası*). Recognizing the health risks of irrigating by sewage, the Municipality banned the cultivation and sale of vegetables with the use of any water source but tap water.[106] The ones who complained the most about the obligation to use

103 "Tifo ile Mücadelede İki Mühim Nokta: 1) Terkostan Başka Suları da Temizlemek, 2) Şehir İçinden Bostanları Kaldırmak," *Akşam*, June 28, 1937, 1.

104 "Sıhhiye Vekili Diyor Ki: Su ve Lağım Tesisatı Yapılmadıkça Her Sene İstanbul'da Tifo Vakası Çıkabilir," *Akşam*, June 29, 1937, 1.

105 "Kuyu Suları Muayene Ediliyor: Son 48 saatte 37 tifo vakası görüldü," *Akşam*, July 13, 1937, 3.

106 "Bostanlar: Terkos Suyu ile Sulanmayanlar Kapatılacak," *Akşam*, August 6, 1937, 2.

tap water were the bathhouse and garden owners.[107] So the Municipality began installing tap water pipes in market gardens as well as bathhouses.[108] Nevertheless, these measures caused an uproar among the gardeners, as the amount of water used in garden irrigation was much higher than that was used by households. From this perspective, the Municipality's Water Administration (Belediye Sular İdaresi) needed to offer a significant discount for the gardens, which required using hundreds of cubic meters of water daily.[109] Eventually, the Water Administration decided to extend the discounted rate applied to factories to the gardens as well. Yet, this move did not satisfy the garden owners either. According to the gardeners, their need for water was incomparably greater than factories, making it necessary to implement a considerable exemption. Another pressing issue was the potential increase in vegetable prices. Until now, gardeners had incurred almost no expense for irrigation. Paying for water would directly reflect to the production cost, which would in turn be passed to the end consumer.[110] (Figure 6.4).

107 "Susuzluk Derdi: Sular Umum Müdürünün Verdiği İzahat," *Cumhuriyet*, August 5, 1937, 2.

108 "Bostanlarda Terkos Suyu," *Cumhuriyet*, August 6, 1937, 2.

109 On average, it takes 500 kilograms of water to produce one kilogram of vegetables. See. Ege, "Umumi ve Hususi Sebzecilik", 41–42. "Bostanlar: Terkos Suyu ile Sulanmayanlar Kapatılacak," *Akşam*, August 6, 1937, 2.

110 "Şehirlerin İçinde Bostan Bulunmayacak: Sıhhiye Vekaleti Bu Hususta Tedkikat Yapmaya Başladı," *Akşam*, August 9, 1937, 1.


Şehirlerin içinde bostan bulunmıyacak

Sıhhiye Vekâleti bu hususta tedkikat yapmağa başladı

Harbiye arkasındaki bostanlardan Maçkaya bakış

Figure 6.4 "There will be no gardens in the cities: the Ministry of Health has begun investigations into this matter." SOURCE: *Akşam* (August 9, 1937).

By August 1937, negotiations between the garden owners and the Municipality's Water Administration were still ongoing when the Ministry of Health and Social Assistance (Sıhhiye ve Muavenet–i İçtimaiye Vekaleti), led by Refik Saydam, intervened and began carefully examining the condition of the market gardens within the city. The findings indicated that even irrigating the gardens with clean water would not guarantee that vegetables would grow free of contamination. It was inferred that although the gardens were improved with pipelines, polluted waters

seeping from nearby sewers could still mix with rainwater and contaminate the produce. Under these conditions, it was deemed impossible to cultivate completely clean vegetables and fruits within the city that the public could safely consume. Also, it was a challenging task to find an abundant supply of purified and germ–free body of water like Terkos lake to irrigate gardens in many other cities and towns.[111] Consequently, the Ministry of Health and Social Assistance had, in principle, decided to prohibit gardens within the city limits. However, since immediate exercise of the decision would harm Istanbul's vegetable and, to some extent, fruit production, it was agreed to be implemented gradually, starting the following year (1938). The report indicated that if the relevant articles of the Public Health Law fall short, a new bill would be drafted and submitted to the Parliament.[112]

The newspaper article of February 27, 1940 shows that the implementation of this decision regarding the gardens within the city borders was further delayed. The article entitled "The Gardeners' Wishes" summarizes the report prepared by the Gardeners' Association on the city's gardens. According to the report, there were 2,800 gardens in the city of Istanbul.[113] A significant proportion of Istanbul's vegetable and even fruit needs were supplied from these areas. Located within the city, these gardens ensured that the public could consume fruit and vegetables at lower prices. It was argued that their removal would lead to rising prices and a potential crisis in the supply of fruit and vegetables. After much

111 Ibid., 1

112 Ibid., 1

113 The number of market gardens in Istanbul varies according to different sources. In 1929, the municipality's official publication stated that there were 685 market gardens in the city. See. Ali Suat, "Belediyeler Şehircilik Fenni," 399–402. The report of the Agricultural Congress of 1931 put the figure at 1,200. The reason given was that the migrants had stopped growing tobacco and started growing vegetables instead. See. Hulki, "Sebzecilik," 937. In 1940, the Gardeners' Association reported that there were 2,800 market gardens. This change may be due to 1) the exaggeration of the number of gardens by gardeners who are at risk of job loss. 2) a gradual increase in the number of gardens in the city, 3) an extension of the municipal boundaries, or 4) the inclusion of gardens outside the municipal boundaries in the count.

discussion, the gardeners felt that this decision (to ban market gardens in the city) would not be approved by the council. If any of these gardens were in an unhygienic condition, the gardeners hoped that they would be improved, while those in a hygienic condition would be allowed to continue their functions by the Municipal Council.

Thus, it seems that the situation that was to be legalized in 1937 did not appear on the municipal agenda until the 1940s, at which time it became the subject of intense debate.

§ 6.4 Gardens, National Dignity, and the "Beautification of İstanbul"

> *[…] beautifying the city with a shovel and pickaxe while having a little money in your pocket.*
>
> *– V. Birson, Cumhuriyet, May 6, 1935*

By the twentieth century, urbanization continued to occupy the political agendas of many developed and developing countries. In this context, municipalities were expected to fulfill duties such as meeting the growing cities' increasing demand for sanitary food and functional housing. In 1933, the first zoning law of the Republic, known as the Municipality Structures and Roads Act No.2290, was enacted.[114] The zoning law drew clear boundaries between spatial functions. According to this, the boundary between the internal and external parts of the Municipality had to be defined by considering certain structures such as barracks, factories, hospitals, warehouses, slaughterhouses, cemeteries, and agricultural areas including vineyards, gardens, and market gardens. These functions, located between the city and the countryside, could be extended further as the city grew. Thus, these functions were always at risk of losing their current location.

114 Ali Suat, "Nahiyelerin İktisadi Faaliyetleri," *İstanbul Şehremaneti Mecmuası*, no. 56 (April 1929): 273–276.

The law aimed to adapt the city to the new aesthetic understanding and provide a legal foundation for the "beautiful city" movement, which was the popular urban planning school of the time. This movement, observed in both Western cities and the Soviet Union, had distinct characteristics such as creating wide roads, boulevards, and squares, building monumental structures, and ensuring the city's artistic integrity by creating new open spaces and reference points within the city.[115] The Building Code of 1882, which was considered the old zoning law, had prioritized areas that required strategic intervention in the city such as fire zones, new development corridors, and the like. Whereas the 1933 Municipal Building and Roads Law approached cities from a holistic perspective in line with the mindset of the time. The new zoning law was prepared with excessive detail and rigor. Yet, it was not flexible enough to accommodate the unique characteristics of cities across the Republic. For one, it overlooked important variables such as population, climate, and economic diversity of cities. Consequently, urban zoning plans of 1930s were not prepared with specific goals in mind, but rather focused on the superficial and formal provisions stated in the law.[116] Experts and bureaucrats gave careful attention in preparing the zoning plans, as they would facilitate or impede the demand towards plots, and thereby determine the land value. In this sense, a direct relation between the zoning strategy and municipal revenue could be drawn. It was expected that the Municipality would generate significant revenue from the sale of land within and around the city that was currently yielding no income.[117] Thus, here occurred a proliferation of alternative proposals with different priorities regarding Istanbul, which also stimulated hot debates about the city's capacity to develop and the direction it should take. Journalist and writer Ercümend Ekrem Talu categorized the proposed plans for Istanbul into three groups. Some of these aimed to establish an entirely new city without considering the current situation. The second

115 Ersoy, *Osmanlı'dan Günümüze İmar ve Yasalar*, 148.

116 Ibid., 155.

117 Osman Nuri Ergin, "Umrani Kısım: İstanbul'un Umranı Hakkında Bir Fransızın [Henri Turot] Fikri," İstanbul Şehremaneti Mecmuası, no. 4 (December 1924): 41–43.

group suggested partial changes to the existing city, proposing alterations here and there. The third group focused solely on improving the existing city.[118]

One of the main topics of debate was what to do with the city's amorphous topography and settlement form. For instance, Istanbul's former mayor Cemil Topuzlu described the two main reasons for the city's inability to develop. First, there was no map or zoning plan for the city, leading to arbitrary practices and lack of planning. Second, the city was too large and scattered for the Municipality's budget, making it difficult to achieve the desired results with the expenditures.[119] For him, for Istanbul to resemble European cities, the port of Istanbul needed to be relocated to the area between Yenikapı and Yedikule. The main train station at Sirkeci and coal depots on the shoreline of the Bosporus should also be moved to the same area. Finally, the factories along the Golden Horn should be relocated and rebuilt in a new industrial zone outside the city.[120] Contrary to Dr. Cemil Topuzlu, Prime Minister İsmet İnönü considered the idea of such radical measures as a project suitable not for the present day but for the future of a larger Istanbul. The proposed project was not appropriate for the current state of the city. For İnönü, the planning of Istanbul at the time meant to focus on organizing the inner parts of the city.[121] In other words, Istanbul should be revitalized, by introducing new works without extending beyond the city's borders, while preserving its historical features. In this way, modern urban planning needs would not be neglected, and the city's historical character would become more pronounced. İnönü did not believe in creating new settlements outside the municipal boundaries of Istanbul since, in his view, such an expansion would unnecessarily burden the Municipality with excessive costs, turning into nothing more than a waste.

118 Ercümend Ekrem Talu, "İstanbul'un Planı," *Cumhuriyet*, February 5, 1935, 5.

119 Salih Alaçam, "İstanbulumuzun İmarı Hakkında Ne Diyorlar," 185–186.

120 Ibid., 185–186.

121 Salih Alaçam, "Cumhuriyet Halk Partisi Başkanının İstanbul'un İmarı Hakkındaki Fikirleri," 228–229.

The development of Istanbul as a European city was seen as a costly and burdensome task. The main reason for this was the insufficient budget. It was difficult to carry out a large, long-term project and remain committed to it. Therefore, smaller tasks that could be easily improved and implemented, such as removing elements that disrupted the visual appeal, were preferred over large–scale urban development projects. According to Ahmet Nevzat, these were small administrative tasks that were not part of large urban development projects and did not directly involve money. However, they touched upon health and aesthetics, addressing issues that disrupted the city's elegance and cleanliness, and ultimately contributed to a shabby appearance for the city.[122] From this perspective, numerous vegetable gardens of the city, especially the ones in the center, were perceived as useless and unaesthetic. In other words, the removal of the market gardens was now seen not only as a health necessity, but also an aesthetic preference.

The theme of emerging national identity also dominated these arguments. For instance, the idea of clearing historical city walls of market gardens and other debris was repeatedly emphasized. In this way, the area would not only acquire a touristic identity but also preserve the national "dignity" of the city. In addition to the market gardens, the vegetable and fruit market established by villagers at the base of the city walls near Edirnekapı was also deemed as an aesthetic problem. Carts and animals from the villages were left in the area, and the animal waste made the neighborhood nearly impassable. Hundreds of travelers visiting the walls were confronted with this unpleasant sight and smell. Taking this into account, the Municipality decided to relocate the market.[123] Another noticeable deficiency in Istanbul was the lack of squares, parks, and green spaces. To address this gap, the Municipality sought to convert areas with

122 "Tetkik ve Tetebbü: Şehrimizde Yapılması ve Islahı Lazım Gelen Bazı Ufak İşler," *İstanbul Şehremaneti Mecmuası*, no. 65 (January 1929): 171–174.

123 "Edirne Pazarı Kaldırılıyor," *Cumhuriyet*, October 28, 1933, 2.

gardens that were free of buildings into large park spaces.[124] According to news articles from 1935 titled “The Beautification of Istanbul”, vacant garden plots stretching from Dolmabahçe Square to Maçka, Atatürk Square (Harbiye), General İnönü Square (Surp Agop), and the City Garden (Taksim Garden) should serve as a starting point for building a modern-looking city. In the writer's view, the market gardens stretching through Dolmabahçe and Maçka could be transformed into a "national park”. He wrote:

> We don’t need vegetable gardens anymore, we need asphalt. […] All we want is to demolish, demolish as soon as possible, and open up spaces. The areas that are cleared will be improved in no time.[125] (Figure 6.6)

124 “Şehirdeki Meydanlar ve Yeşil Sahalar: Belediye Yeşil Sahaları Kabil Olduğu Kadar Çoğaltmak, ve Sokaklardan Denizin Görünmesini Temin Etmek İstiyor,” *Akşam*, December 4, 1939, 3.

125 “Dolmabahçe Meydanı Nasıl Açılabilir? Paraya Lüzum Yok,” *Cumhuriyet*, May 6, 1935, 10.



Figure 6.6 "How can Dolmabahçe Square be expanded? No money is needed.." SOURCE: *Akşam* (May 6, 1935).

§ 6.5 Concluding Remarks

The development of horticulture in Istanbul was negatively affected by two main factors: a shrinking consumer market and a shortage of skilled labor due to population decline. The second was related to the departure of the non–Muslim population, who worked as gardeners in the villages of Istanbul, as a result of wars and population exchanges. The remaining gardeners (some of them were population exchange immigrants – *mübadil*–) faced a range of difficulties, including access to fertilizer,

seeds, energy, water and credit. The most important of these was the supply of fertilizer, an essential component of vegetable growing. In Istanbul, the number of animals had also declined in line with the human population. The increase in the number of cars also contributed to the decrease in the number of draught animals. The high cost of living and shortage of cash also affected gardeners. Operating on a small scales in comparison with gardeners from other provinces, that were unable to work together due to the scattered topography of Istanbul. As obtaining loans from banks was practically impossible, they had to borrow from intermediaries. Another challenge for gardeners in Istanbul was the early season produce from the warmer provinces. These provinces were naturally more suited to growing vegetables due to factors such as climate, cheap labor and available land. Early season vegetables from these distant and warmer provinces (most of which were relatively more durable, such as okra, artichokes and beans) took about a day by train. They were generally transported in open or ventilated wagons. This had a negative impact on the gardeners, especially in the early season production areas of the city (such as Pendik–Maltepe). In response, the gardeners demanded that vegetables from outside the city be taxed. But it was quite contrary to the idea of a national common market, a fundamental principle of the emerging nation–state. In fact, the government was encouraging farmers in warmer provinces to grow vegetables. Istanbul and Ankara were seen as markets where these farmers could develop before expanding abroad. In this way, vegetable production was gradually scaled up.

At the same time, the government began to remove and close down rural elements within the city limits, such as barns and market gardens, because they did not meet modern hygiene and aesthetic standards. Market gardening, which by its nature involves contact with wastewater, had historically been associated with the spread of infectious diseases such as typhoid and cholera. In the late Ottoman period, although market gardens caused hygiene and public health problems, no radical action was taken against them due to administrative confusion and overlapping authorities. But the new regime was determined to eradicate diseases such as malaria, cholera and typhoid through the health campaign it launched.

Especially typhoid and cholera emerged in areas of high population density and inadequate sanitation. Market gardens, because of their ''unclean'' nature, were the prime suspects when such an outbreak started in the city. In this context, the market gardens became a matter of public debate during the typhoid epidemic that began in 1935 and peaked in 1937. The issue was thoroughly debated by ordinary citizens, gardeners, columnists, experts and politicians. Although the gardens contributed to the city's economy, it was concluded that their presence in the city was inappropriate. However, as the transport infrastructure of the time was not yet developed enough to fully serve Istanbul's population, the gardens were able to maintain their position for a while longer

7

Conclusion

Of course, vegetable gardens in the middle of the city amidst sewage would not be in keeping with a civilized outlook. But we have turned these gardens, the ornaments of the city, into dry plots. [...] Today the city is parceled out to such an extent that we, all twenty million citizens of Turkey, could live in the city if we built apartments on these plots. Since this is an insane, unrealistic idea, we should keep Istanbul's population at one and a half million and turn all the remaining land into vineyards and vegetable gardens.

– Vala Nurettin, Cumhuriyet, 1946.

Istanbul's agricultural system did not suddenly disappear during or after 1930s. “Rural” elements interwoven with the “urban” persisted for some decades, albeit in a waning presence. Importantly, the coverage they once had have diminished, the functions they fulfilled have lost prominence, and the influence they held over the urban life have declined. Together with the process of exclusion of agricultural activities from urban space, metabolic flows of the city and its environs had to

reconfigure and adapt to changing conditions. Although this process has spanned decades, giving the impression of a slow–paced and gradual process, this dissertation established that the impact of the developments Istanbul's agricultural system underwent from the late Ottoman to the early Republican years marked a radical break in the structural sense.

The first period focused on the "urban" and its periphery, examining spatial transformations in a physical context. It was primarily related to the outward explosion of the city, which took two main forms: first, large–scale growth through the construction of workers' and immigrant settlements on state land; second, individual movement by city dwellers seeking to escape the disadvantages of proximity to the center, such as high cost of living, fires, taxes, sanitation and security problems. The transformation of unallocated state land into private property through the creation of de facto conditions as part of a long–standing tradition (such as the construction of buildings, orchards and vineyards). In this process, agricultural elements (market gardens, vineyards and orchards) functioned as active agents in the urban land development process. The most significant example of this was the presence of vineyards and orchards around large cities such as Istanbul, Bursa and Edirne. This outward explosion was also marked by inward implosion, as the rise in urban land rents played a major role in the conversion of agricultural land (market gardens, etc.) into building plots. In this period of both inward and outward urban growth, the newly emerging modern municipality also began to grapple with the issue of urban boundaries, as its responsibilities grew with a limited budget. However, the processes show that drawing a boundary around the city was not just a top–down project initiated by state institutions. It was also a bottom-up process shaped by the prevailing conjuncture. Thus, theme, the city boundaries in both de jure and de facto situations, emerged as a field of contention and negotiation in relation with various issues such as immigration, rent, taxation and high cost of living.

The second period began from a time when the country grappling with the challenges of the transition from empire to nation–state at the macro level. The period was characterized by the widening rift in the

urban metabolism. It was primarily related to the exploitation of the "urban" over more distant "rural" or "non–city", made possible by improvements in the transportation facilities. In this part, the Istanbul's agricultural system was examined in relation to various factors including the high cost of living, the vegetable market and porters. In the 1930s, many journalists, columnists, experts, politicians and, above all, gardeners voiced their thoughts on the city's agricultural potential and its shortcomings. During the first half of the decade, Istanbul showed the potential to be not only an industrial city, but perhaps even more so an agricultural one. However, both the conditions of the city and perceptions about it changed quickly between the first and second half of the 1930s. The long–established agricultural system, composed of both human and non–human elements, was heavily undermined, especially after the mid–1930s, by conjunctural factors (e.g. reduced consumption potential, high cost of living, construction of a central vegetable market, improvements in transportation, etc.), top–down projects (such as adaptation to modern hygienic and aesthetic standards, economic unification, etc.) and bottom–up processes (such as gardeners' indebtedness to middlemen, their inability to compete with vegetables from warmer provinces, lack of budgets to provide clean water to meet modern hygienic standards, etc.). and bottom–up processes (such as the gardeners' indebtedness to middlemen, their inability to compete with vegetables from warmer provinces, their inadequate budgets for providing clean water to meet modern hygiene standards, and their inability to organize effectively in the face of these problems, etc.). In short, the system suffered considerable damage, especially in the second half of the 1930s. These changes hastened the rupture in the urban–rural relationship and how the urban and the rural come into contact, as the physical and socio–economic scale of their extent began expanding in an unprecedented manner, reaching to parts as close as Küçükçekmece on the western edge of the city and as distant as İzmir, Adana, and Mersin.

In the late 1930s, most of the market gardens within the city limits were converted to vacant plots. After World War II, the empty spaces left by the market gardens were filled with houses built by people who had

moved from the countryside to the city. In some respects (population growth, increased demand for housing and food) this period showed similarities to the late nineteenth century. Crucially, Istanbul did not reach its late nineteenth–century population until the 1950s.[1] The populist policies of this period allowed those who did not want to pay high land rents to avoid them, while at the same time creating opportunities for those who did. The opportunities for growth in fragments and the ease of avoiding rent payments to leapfrog development around the city. Initially, this figured as a fragmented fabric. Over time, however, landowners in the vacant areas maximized the rental value of their plots by constructing high–density buildings and filling in the gaps.[2]

Throughout decades, market garden sites have been filled with multi–story apartment blocks to accommodate millions of people. In the twenty first century, Istanbul became one of the largest cities in the world, with a population of over fifteen million. This could not have been made possible without the process of transformation examined in the dissertation. The rapid improvement of transport infrastructure (with the emphasis on railways first, and road transport after 1950s), and the adaptation of refrigeration technologies (with the beginning of domestic refrigerator production through import substitution in 1960s) enabled over time to feed the hundreds of thousands of people who began to immigrate to the city in the wake of the World War II. Consequently, a function that Istanbul had fulfilled for centuries and that was historically associated with the "city'" namely the production of fresh food, moved from the "urban" to the "rural". As Çağlar Keyder and Zafer Yenal puts it, this was perhaps the clearest indication that the distance between the table in the city and the field in the village was growing.[3]

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1 The population within the municipal boundaries of Istanbul was recorded as 983,000 in 1950, 1,467,000 in 1960, 2,133,000 in 1970 and 2,773,000 in 1980.

2 Tekeli, *Modernizm, Modernite ve Türkiye'nin Kent Planlama Tarihi*; Elvan Gülöksüz, "The Role of Landowner Behaviour in the Growth Pattern of Cities" (PhD Dissertation, The Middle East Technical University, 1998), 1–6.

3 Çağlar Keyder and Zafer Yenal, *Bildiğimiz Tarımın Sonu: Küresel İktidar ve Köylülük* (İstanbul: İletişim Yayınları, 2020), 14.

This study examined the historical transformation of Istanbul's agricultural system by closely analyzing two key periods. The dissertation aimed to fill a significant gap in the literature on the urban history of Istanbul by offering a comprehensive and detailed account of this transformation. At the same time, it proposed a synthesis of conceptual tools from diverse research fields, such as critical urban theory, urban ecology and urban environmental history, that, until now, have rarely been brought together, in order to understand the causes and effects of this transformation from a holistic perspective. The empirical foundation of this historical analysis was built upon a range of primary sources. Some of these sources have been published for the first time as part of this dissertation, and the data extracted from them has been processed and visualized with the aim of serving as a point of reference for future research in the field.

The transformation of urban agricultural systems in cities across Turkey and its neighboring regions during the nineteenth and early twentieth centuries remains underexplored and open to further research. For example, the trajectory of urban agriculture may have diverged in warmer climates and port cities with agricultural economies (e.g. İzmir, Adana, Mersin), or in cities in the interior of Anatolia with different climatic conditions. In these examples, it is possible to speculate that rather than being pushed out of the city, it may have undergone a process of rearticulation within the urban fabric. Another promising area of research concerns food systems beyond fresh vegetables, such as dairy products, etc., which remain relatively understudied. Finally, as these transformations did not take place in the same timeframe or under the same socio–economic conditions in each city, extending the research to the post–1950s period may provide further valuable insights into the urban–rural relationship and its transformation. This dissertation aims to make a fundamental contribution to this rich and stimulating research agenda.

Appendix A Hometowns of the Gardeners (Inside the City Walls, 1734)

Hometown		Non-Muslim	Muslim	Total	Hometown		Non-Muslim	Muslim	Total
Premedi	(Permet)	128	7	135	Tikveş		5	0	5
Niğde		129	3	132	Vardar		4	0	4
Kesriye	(Kastoria)	83	4	87	Foça	(Fotcha)	0	3	3
Ostrova	(Arnissa)	81	2	83	Karadağ		3	0	3
Ohri	(Ohrid)	78	1	79	Karaferye	(Veria)	3	0	3
Sarıgöl	(Ellispontos)	57	11	68	Tırnovi	(Veliko Tarnovi)	3	0	3
Yanya	(Ioannina)	61	0	61	Üsküp	(Skopje)	2	0	2
Manastır	(Bitola)	47	2	49	Vodina	(Edessa)	2	0	2
Florine	(Florina)	45	0	45	Eğridere		1	0	1
Selanik	(Thessaloniki)	34	1	35	Zağra	(Stara-Zagora)	1	0	1
Istanbul		22	1	23	Kalkandelen	(Tetovo)	1	0	1
Menahir		16	0	16	Köstence	(Costanta)	1	0	1
Pirlepe	(Prilep)	16	0	16	Köstendil	(Kyustendil)	1	0	1
Prespe	(Prespes)	16	0	16	Pazarcık	(Pazardjik)	1	0	1
Vidin		16	0	16	Serez	(Serres)	1	0	1
Filibe	(Plovdiv)	8	0	8	Sofya	(Sofia)	1	0	1
Korçe	(Korçe)	5	3	8	Tekfurdağı	(Tekirdağ)	1	0	1
Avlonya	(Vlore)	5	1	6	Tirebolu		1	0	1
Koniçe		6	0	6	Uzunköprü		1	0	1
Edirne		5	0	5	Yenişehir	(Larissa)	1	0	1
Elbasan		5	0	5	Unknown		34	8	42
Total							931	47	978

SOURCE BOA DBŞM. d 1841.

Appendix B Hometowns of the Gardeners. (Inside the City Walls, 1827).

Hometown		NM	M	Unk.	T.	Hometown		NM	M	Unk.	T.
Istanbul	(Asitane)	276	13	0	289	Korçe		2	0	0	2
Manastır	(Bitola)	152	0	0	152	Lofça	(Lovech)	2	0	0	2
Ohri	(Ohrid)	144	0	0	144	Tekfurdağı	(Tekirdağ)	2	0	0	2
Florine	(Florina)	106	0	0	106	Tırnovi	(Tarnovo)	1	0	0	1
Sarıgöl	(Ellispontos)	90	0	0	90	Bosna	(Bosnia)	1	0	0	1
Foça	(Fotcha)	37	0	0	37	Çırpan	(Chirpan)	1	0	0	1
Permet	(Premedi)	33	0	0	33	Dimetoka	(Didimoticho)	1	0	0	1
Niğde		19	0	0	19	Diyarbakır		1	0	0	1
Kırkkilise	(Kırklareli)	15	0	0	15	Girit	(Crete)	1	0	0	1
Göllü Kesre	(Kastoria)	12	0	0	12	Kastamonu		0	1	0	1
Resne	(Resen)	8	0	1	9	Kazanlık	(Kazanluk)	1	0	0	1
Sakız	(Chios)	6	0	0	6	Köstence	(Costanta)	1	0	0	1
Selanik	(Thessaloniki)	5	0	0	5	Pazarcık	(Pazardjik)	1	0	0	1
Filibe	(Plovdiv)	4	0	0	4	Pirlepe	(Prilep)	1	0	0	1
Girne	(Kyrenia)	4	0	0	4	Semya		1	0	0	1
Serez	(Serres)	4	0	0	4	Uzunlu	(in Yozgat)	1	0	0	1
Edirne		4	0	0	4	Üsküp	(Skopje)	1	0	0	1
Hurşide		3	0	0	3	Van		1	0	0	1
Köprü	(Uzunköprü)	3	0	0	3	Draç	(Durres)	1	0	0	1
Ostrova	(Arnissa)	3	0	0	3	Yanya	(Ioannina)	1	0	0	1
Vidin		3	0	0	3	Zağra	(Zagora)	1	0	0	1
Petersko	(in Burgas)	3	0	0	3	Yenişehir	(Larissa)	1	0	0	1
Cumapazar	(Ptolemaida)	2	0	0	2	Unknown		10	0	0	10
İncemai		0	1	1	2						
						Total		970	15	2	987

SOURCE BOA. NFS. d 15

Appendix C Hometowns of the Gardeners (Outside the City Walls, 1733).

Hometown	Non-Muslim	Muslim	Un-known	Total	Hometown	Non-Muslim	Muslim	Un-known	Total
Premedi	63	7	2	72	Borlu	2	0	0	2
Ohri	44	2	1	47	Komotini	2	0	0	2
Niğde	34	5	2	41	Konya	2	0	0	2
Manastır	31	3	1	35	Lofça	2	0	0	2
İstanbul	16	3	1	20	Malkara	2	0	0	2
Ostrova	16	0	0	16	Samakov	2	0	0	2
Göllü Kesre	15	0	0	15	Serez	2	0	0	2
Rusçuk	10	4	0	14	Sofya	2	0	0	2
Avlonya	3	10	0	13	Uzunköprü	2	0	0	2
Tırnovi	10	1	0	11	Elbasan	1	1	0	2
Pirlepe	9	0	1	10	Aksaray	1	0	0	1
Filibe	9	0	0	9	Ahyolu	1	0	0	1
Sarıgöl	7	2	0	9	Eski Cuma	1	0	0	1
Belgrad	6	1	0	7	Gora	1	0	0	1
Koniçe	5	2	0	7	Kırkkilise	1	0	0	1
Florine	5	0	1	6	Plevne	1	0	0	1
Edirne	4	1	0	5	Şarköy	1	0	0	1
Korçe	5	0	0	5	Tepedelen	1	0	0	1
Selanik	4	1	0	5	Yanya	1	0	0	1
Mora	4	0	0	4	Derbend	1	0	0	1
Vodina	4	0	0	4	Grebeneş	1	0	0	1
Ziştovi	4	0	0	4	Kostorova	1	0	0	1
Osmanpazar	3	0	0	3	Köprü	1	0	0	1
Zağra	3	0	0	3	Unknown	188	45	4	237
Shumen	3	0	0	3					
Total						536	87	13	636

SOURCE NFS. d 1

Appendix D Hometowns of the Gardeners (Outside the City Walls, 1792).

Hometown	Muslim	Non-Muslim	Total	Hometown	Muslim	Non-Muslim	Total
Permet	27	127	154	Karlova	1	1	2
Niğde	67	8	75	Köstendil	2	0	2
Grebeneş	68	0	68	Nikoz ?	2	0	2
Edirne	58	0	58	Ohri	2	0	2
Filibe	51	3	54	Pirlepe	2	0	2
İstanbul	44	5	49	Plevne	2	0	2
Tırnova	14	1	15	Tekfurdağı	2	0	2
Kırkkilise	13	0	13	Vidin	0	2	2
Sarıköy	13	0	13	Yenice	2	0	2
Delvine	12	0	12	Badracık	1	0	1
Tırnovi	10	0	10	Berat	0	1	1
Elbasan	0	9	9	Bosna	1	0	1
Cuma	7	0	7	Çerkeş	0	1	1
Kızanlık	6	0	6	Çirmen	0	1	1
Kozluca	5	0	5	Debre	1	0	1
Manastır	4	1	5	Dupniçe	1	0	1
Yanbolu	5	0	5	Eflak	1	0	1
Agrafa	4	0	4	Gabrova	1	0	1
Kavaklı	4	0	4	Harput	0	1	1
Kesriye	4	0	4	İznikmid	1	0	1
Tepedelen	4	0	4	Karadeniz	1	0	1
Katraniçe	3	0	3	Karamürsel	1	0	1
Leskovit	3	0	3	Köprülü	1	0	1
Nevşehir	3	0	3	Letroz	1	0	1
Pazarcık	3	0	3	Midilli	1	0	1
Sakız	3	0	3	Silistre	0	1	1
Samakov	3	0	3	Sofya	1	0	1
Sofra	3	0	3	Tuna	1	0	1
Avlonya	1	1	2	Üsküp	1	0	1
Belgrad	1	1	2	Yanya	1	0	1
İslimye	2	0	2	Unknown	22	6	28
				Total	598	70	668

SOURCE A. {DVN. d 831.

Appendix E Hometowns of the Gardeners. (Outside the City Walls, 1793).

Hometown		NM	M	Unk.	T.	Hometown		NM	M	Unk.	T.
Permet	(Premedi)	157	24	1	182	Elbasan		1	1	0	2
Ohri	(Ohrid)	110	10	1	121	Görice	(Korçe)	2	0	0	2
Niğde		80	15	1	96	Çırpan	(Chirpan)	2	0	0	2
Edirne		70	0	0	70	Sofya	(Sofia)	2	0	0	2
Manastır	(Bitola)	68	0	1	69	Uzuncaabad	(Haskova)	2	0	0	2
Grebeneş	(Grebenets)	59	0	0	59	Karakilise	(Mavrookklisi	2	0	0	2
Istanbul		42	9	1	52	Florine	(Florina)	2	0	0	2
Filibe	(Plovdiv)	36	2	1	39	Köprü		2	0	0	2
Pirlepe	(Prilep)	25	3	0	28	Narta	(in Vlore)	1	0	0	1
Delvine	(in Vlore)	20	0	0	20	Bosna	(Bosnia)	1	0	0	1
Sarıgöl	(Ellispontos)	19	0	0	19	Burgaz	(Burgas)	1	0	0	1
Tırnovi	(Tarnovo)	15	1	0	16	Gabrova	(Gabrovo)	1	0	0	1
Vidin		13	0	0	13	Köstendil	(Kyustendil)	0	1	0	1
Girne	(Kyrenia)	12	0	0	12	Plevne	(Pleven)	1	0	0	1
Kırkkiliese	(Kırklareli)	10	1	0	11	Yanbolu	(Yambol)	1	0	0	1
Pazarcık	(Pazardjik)	7	0	0	7	Çakal	(Komotini)	1	0	0	1
Samakov	(Samokov)	5	0	0	5	Karlıili	(Arta in Epir)	1	0	0	1
Varna		5	0	0	5	Mora	(Peloponneso)	1	0	0	1
Zağra	(Zagora)	5	0	0	5	Selanik	(Thessaloniki)	1	0	0	1
Ostrova	(Arnissa)	4	1	0	5	Yanya	(Ioannina)	1	0	0	1
Yenişehir	(Larissa)	5	0	0	5	Zeytün	(Lamia)	1	0	0	1
Sakız	(Chios)	5	0	0	5	Andre	(Szentendre)	1	0	0	1
Kavak		5	0	0	5	Kumanova	(Kumanovo)	1	0	0	1
Belgrad	(Belgrade)	3	1	0	4	Bükreş	(Bucureşti)	1	0	0	1
Tepedelen	(Tepelene)	0	3	0	3	Eflak	(Wallachia)	1	0	0	1
Kazanlık	(Kazanluk)	3	0	0	3	Gabroviç	(Gabrovac)	1	0	0	1
Niğbolu		3	0	0	3	Midilli		1	0	0	1
Cuma	(Ptolemaida)	3	0	0	3	Kefke	(Kefken)	1	0	0	1
Katraniçe		3	0	0	3	Konya		1	0	0	1
Malatya		3	0	0	3	İnebolu	(in Kastamonu)	1	0	0	1
Nevşehir		3	0	0	3	Bartın		0	1	0	1
Avlonya	(Vlore)	0	2	0	2	Unknown		15	1	0	16
								856	76	6	938

SOURCE BOA. NFS. d 4

Appendix F Hometowns of the Gardeners in Sütlüce in 1845.

Hometown		Non-Muslim	Muslim	Total
Ohri	(Ohrid)	129	0	129
Manastır	(Bitola)	25	0	25
Istanbul	(Asitane)	20	3	23
Köprü	(Uzunköprü in Edirne)	4	0	4
Amasra		0	3	3
İstefanya	(Stefania in Thessaloniki)	0	2	2
Palanka	(Kriva Palanka)	2	0	2
Permet	(Premedi)	2	0	2
Brekaska		1	0	1
Berkofça	(in Bulgaria)	1	0	1
Berye		1	0	1
Ergiri	(in Albania)	1	0	1
Pilare		1	0	1
Sakız		1	0	1
Total		188	8	196

SOURCE BOA. NFS. d 369.

Appendix G Hometowns of the Gardeners in Kağıthane in 1845.

Hometown		Non-Muslim	Muslim	Total
Istanbul		64	1	65
Burgaz	(Bergos in Bulgaria)	20	0	20
Yanya	(in Greece)	10	0	10
Ergiri	(in Albania)	3	0	3
Eğin	(in Erzincan)	1	0	1
Total		98	1	99

SOURCE BOA. NFS. d 369.

Appendix H Hometowns of the Gardeners in Kasımpaşa in 1845.

Hometown		Non-Muslim	Muslim	Total
Ohri	(Ohrid)	1041	0	1041
Manastır	(Bitola)	225	4	229
Pirsepe	(Pirsepa in Bitola)	72	4	76
Premedi	(Pertmet)	17	4	21
Istanbul		18	3	21
Florina	(in Greece)	10	0	10
Sarıgöl		9	0	9
Resne	(in Macadonia)	8	0	8
Sakız	(in Greece)	8	0	8
Kesriye		7	0	7
Pirlepe	(in Macadonia)	6	0	6
Köprü	(Uzunköprü in Edirne)	5	0	5
Pravişte	(Provişte)	0	3	3
Ergiri	(In Albania)	2	0	2
Koniçe		0	2	2
Siroz	(Siros in Greece)	2	0	2
Bosna		1	0	1
Cuma		1	0	1
Eğin	(in Erzincan)	0	1	1
Filibe	(in Bulgaria)	1	0	1
Gerede	(in Bolu)	0	1	1
Kolonya	(in Fier, Albania)	0	1	1
Köstendil		1	0	1
Örköy?	(Ivaylovgrad in Bulgaria)	1	0	1
Varna	(in Bulgaria)	0	1	1
Unknown		11	2	13
Total		1446	26	1472

SOURCE BOA. NFS. d 369.

Appendix I Hometowns of the Gardeners in Galata in 1845.

Hometown		Non-Muslim	Muslim	Total
Istanbul		5	0	5
Ergiri	(in Albania)	27	0	27
Kesriye		2	0	2
Manastır	(Bitola)	16	0	16
Ohri	(Ohrid)	44	0	44
Pirlepe		4	0	4
Premedi	(Permet)	80	0	80
Sakız	(Chios)	1	0	1
Unknown		3	0	3
Total		182	0	182

SOURCE BOA. NFS. d 369.

Appendix J Hometowns of the Gardeners in Dolmabahçe in 1845.

Hometown		Non-Muslim	Muslim	Total
Koniçe		6	415	421
Premedi	(Permet)	15	60	75
Ohri	(Ohrid)	57	7	64
Manastır	(Bitola)	13	11	24
Yanya		2	16	18
Florina		8	7	15
Kolonya	(Kolonya in Korçe, Albania)	0	14	14
Ergiri	(in Albania)	13	0	13
Istanbul		1	4	5
Köprü		4	0	4
Boğdanya	(Boğdan)	2	0	2
Donye		0	2	2
Körice		0	2	2
Drama		0	1	1
Elbasan	(in Albania)	0	1	1
İşkodra	(in Albania)	0	1	1
Kumanova	(in Macedonia)	1	0	1
Mostar		1	0	1
Pirlepe		0	1	1
Resne		1	0	1
Sarıgöl	(in Manisa)	1	0	1
Tirebolu	(in Giresun)	0	1	1
Toska	(Tocka in Macadonia)	0	1	1
Vrane	(Vranje)	0	1	1
Unknown		1	14	15
Total		126	559	685

SOURCE BOA. NFS. d 369.

Appendix K Hometowns of the Gardeners in Beşiktaş in 1845.

Hometown		Non-Muslim	Muslim	Total
Ohri		101	1	102
Ergiri	(in Albania)	29	0	29
Premedi		18	0	18
Koniçe		16	1	17
Manastır	(Bitola)	16	0	16
Florina		9	0	9
Istanbul	(Asitane)	8	0	8
Boğdanya		4	0	4
Sakız		4	0	4
Yanya		4	0	4
Edirne		1	0	1
Filibe		1	0	1
Kesriye		1	0	1
Üsküp		1	0	1
Unknown		1	0	3
Total		216	2	218

SOURCE BOA. NFS. d 369.

Appendix L Hometowns of the Gardeners in Ortaköy in 1845.

Hometown		Non-Muslim	Muslim	Total
Ohri		58	0	58
Ergiri		44	0	44
Premedi		43	0	43
Istanbul	(Asitane)	11	0	11
Manastır		9	0	9
Sarıgöl		8	0	8
Florina		7	0	7
Edirne		7	0	7
Boğdanya		3	0	3
Sakız		2	0	2
Tırnova	(in Bulgaria)	2	0	2
Köstendil		1	0	1
Pirlepe		1	0	1
Van		1	0	1
Yanya		1	0	1
Unknown		3	0	3
Total		201	0	201

SOURCE BOA. NFS. d 369.

Appendix M Hometowns of the Gardeners in Baltalimanı in 1845.

Hometown	Non-Muslim	Muslim	Total
Ergiri	67	0	67
Boğdanya	29	0	29
Premedi	19	0	19
Istanbul	8	0	8
Manastır	4	0	4
Yanya	3	0	3
Maden	2	0	2
Avlonya	1	0	1
Sakız	1	0	1
Unknown	9	0	9
Total	143	0	143

SOURCE BOA. NFS. d 369.

Appendix N Hometowns of the Gardeners in İstinye in 1845.

Hometown		Non-Muslim	Muslim	Total
Manastır	(Bitola)	50	0	50
Ergiri	(in Albania)	29	0	29
Istanbul		19	0	19
Ohri		12	0	12
Boğdanya	(Bogdantsi)	9	0	9
Premedi	(Permet)	8	0	8
Pirsepe		6	0	6
Florina		4	0	4
Köprü		3	0	3
Yenişehir		2	0	2
Burgaz		1	0	1
İstarve		1	0	1
Kalazili	(Kalauzlija in North Macedonia)	1	0	1
Kesriye		1	0	1
Unknown		5	0	5
Total		151	0	151

SOURCE BOA. NFS. d 369.

Appendix O Hometowns of the Gardeners in Büyükdere in 1845.

Hometown		Non-Muslim	Muslim	Total
Ergiri	(in Albania)	86	0	86
Istanbul		8	0	8
Yanya		7	0	7
Boğdanya	(Bogdantsi)	2	0	2
Burgaz	(Bergos)	1	0	1
Delitepe	(in Kastamonu)	1	0	1
Unknown		1	0	1
Total		106	0	106

SOURCE BOA. NFS. d 369.

Appendix P Hometowns of the Gardeners in Sarıyer in 1845.

Hometown		Non-Muslim	Muslim	Total
Istanbul	(Asitane)	65	0	65
Delitepe	(in Kastamonu)	6	0	6
Burgaz	(Bergos)	2	0	2
Filibe		1	0	1
Manastır	(Bitola)	1	0	1
Yanya		1	0	1
Unknown		1	0	1
Total		77	0	77

SOURCE BOA. NFS. d 369.

Appendix R Hometowns of the Day Workers in 1845.

Hometown		Non-Muslim	Muslim	Total
Ohri		297	0	297
Manastır		74	0	74
Ergiri	(in Albania)	35	0	35
Istanbul	(Asitane)	14	1	15
Pirsepe		11	0	11
Koniçe		5	5	10
Premedi		7	2	9
Kesriye		7	0	7
Yanya		5	0	5
Resne		4	0	4
Florina		3	0	3
Boğdanya		2	0	2
İstavre		2	0	2
Köprü		2	0	2
Niğde		2	0	2
Pirlepe		2	0	2
Cuma		1	0	1
Debre		1	0	1
Filibe		1	0	1
İzladi	(in Bulgaria)	1	0	1
Kolonya	(in Fier, Albania)	0	1	1
Görice	(Korçe)	1	0	1
Köstendil		1	0	1
Kumanova	(in North Macedonia)	1	0	1
Nevşehir		1	0	1
Sarıgöl		1	0	1
Unknown		1	0	1
Total		489	9	498

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