THE ENVIRONMENT, INSTITUTIONS, AND ECONOMY IN THE NINETEENTH-CENTURY OTTOMAN EMPIRE: THE IMPERIAL LANDED ESTATES OF MİHALİÇ (1840-1850)

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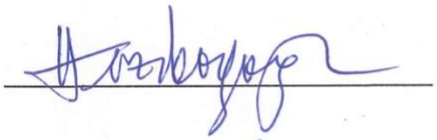
and Economy in the Nineteenth-Century Ottoman Empire:

The Imperial Landed Estates of Mihaliç (1840-1850)

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DECLARATION OF ORIGINALITY

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ABSTRACT

The Environment, Institutions,

and Economy in the Nineteenth-Century Ottoman Empire:

The Imperial Landed Estates of Mihaliç (1840-1850)

Being a micro historical study, this thesis examines the establishment and management of the imperial landed estates of Mihaliç, as an example of a state enterprise, for a decade between 1840 and 1850. Designed and established for producing wool through breeding imported merino sheep in the Western Anatolia, this entrepreneurial activity carried the motivation of lessening dependency on international wool markets. Based on extensive use of archival documents, the major questions revolve around the macro issues of economic performance, institutional setting, and environment-making. In doing so, this study aims at critically engaging with how institutions, economy, and environment came into play as interdependent constituents of a larger social metabolism in the nineteenth century Ottoman Empire. Unlike approaches that consider state enterprises in the empire solely as discrete facts in discussions on modernization, centralization, and bureaucratization, this study suggests that economic enterprises should be first and foremost be considered as a complicated and often continuous production process. Benefiting from rich interaction between history and political economy, this thesis seeks to present and relate many issues such as monetary profitability, coexistence of monetary and in-kind economies, prices, market exchange, capital accumulation and long climatic cycles to each other by putting the relations of production, appropriation and distribution at its center.

ÖZET

On Dokuzuncu Yüzyıl Osmanlı İmparatorluğu'nda Çevre, Kurumlar ve Ekonomi: Mihaliç Çiftlikât-ı Hümâyûnu (1840-1850)

Bir mikro tarih çalışması olarak bu tez, bir devlet işletmesi olan Mihaliç Çiftlikât-ı Hümâyun'unun kuruluşu ve yönetimini 1840 ve 1850 yılları arasında incelemektedir. Bu girişimin tasarım ve kuruluşuyla amaçlanan ithal merinos koyunlarının Batı Anadolu'da ıslahıyla kaliteli merinos yünü elde etmek ve bu sayede uluslararası yün pazarına olan bağımlılığı azaltmaktır. Birincil kaynaklara dayanarak tezin sorduğu temel sorular ise ekonomik performans, kurumsal çerçeve ve çevre-inşası gibi makro meseleler etrafında toplanmaktadır. Bunu yaparken ise eleştirel bir tavırla kurumları, ekonomiyi ve çevreyi Osmanlı İmparatorluğu'ndaki daha büyük bir toplumsal metabolizmanın birbirine bağlı yapıtaşları olarak ele almayı amaçlamaktadır. Devlet işletmelerini modernleşme, merkezileşme ve bürokratikleşme tartışmalarında noktasal olgular olarak değerlendiren yaklaşımlardan farklı olarak, bu çalışma iktisadi teşebbüslerin her şeyden önce daha karmaşık ve çoğunlukla süreğen üretim süreçleri olarak görmeyi önermektedir. Tarih ve ekonomi-politik arasındaki zengin etkileşimden beslenen bu çalışma üretim, el koyma ve bölüşüm ilişkilerini merkezine alarak parasal karlılık, ayni ve nakdi ekonominin içiçeliği, fiyatlar, pazar mübadelesi, sermaye birikimi, uzun dönemli iklim çevrimleri gibi birçok meseleyi birbiriyle ilişkilendirerek sunmayı hedeflemektedir.

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CHAPTER 1

INTRODUCTION

1.1 Recent trends and potentials in economic history

After 2008 financial crisis, there has been a growing interest in the reasons and solutions for the global economic meltdown, which triggered and stimulated very dynamic discussions within academic and non-academic circles. Acknowledging the existence of contemporary disparities among nations in developmental terms, academic inquiries about economic and political problems coincided with the release of substantial books highlighting the necessity of studying such problems in larger and comparative historical contexts. *Capital in the Twenty-First Century* (2013) by Thomas Piketty and *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (2012) by Daron Acemoğlu and James A. Robinson can be two best examples in this regard.

In methodological terms, these two books enrich their historical analyses and arguments by highly sophisticated quantitative (mostly statistical and econometric) tools. While Piketty's *Capital* focuses on the income and wealth inequalities through "distributional questions", Acemoğlu and Robinson offer an institutional framework in which the *rational* agents of historical change would have either incentive or disincentive deriving from the actual constraints drawn by existing rules in a society. Moreover, the most remarkable commonality shared by these two is that they prove that the role of political elites has been crucially important to understand the contemporary economic inequalities today, and the history of inequality cannot be studied solely by limiting ourselves with economic mechanisms. Moreover, more

apparent in “new institutionalism”, which is an academic lineage in economic history pioneered by Douglass C. North and recently advanced by Acemoğlu and Robinson’s recent publications, there is a comparative aspect to be mentioned. In the simplest terms, “new institutionalism” attempts to explain the contemporary economic disparities through non-Western countries’ (either colonial or imperial in origin) degree of adaptation of the private property regimes and democratic institutions historically first advanced by Western (mostly West-Center European) examples.

This dichotomous juxtaposition of Western and non-Western societies subjugates the non-Western economic and political history to the path followed by Western countries and thereby idealizes this specific path by leaving it unquestioned and undifferentiated. It can be seen as a problem to be rethought and resituated by historians, despite its further political implications. Thus, since the fact that colonial and imperial economic and political entities preceded today’s modern nation-states, the question of “how” non-Western imperial and colonial economies had performed during the previous documented centuries seems quite important to be dealt with. From the perspective of economic performance, the foundation and running of the state enterprises, depending on the content and scope of archival material, can provide good examples of case studies. At this point, economic and political history of the Ottoman Empire in the nineteenth and early twentieth century has a great potential to be explored and studied.

In addition to its theoretical dimension, this is a great potential due to the availability, continuity, and volume of the primary sources on the state enterprises in the Prime Ministry Ottoman Archives (BOA) in Istanbul. Receiving moderate attention from economic historians of the empire for a long time, the catalog of

Hazine-i Hassa, which can be translated as Sultan's Privy Purse, still needs to be carefully studied. This catalog contains great archival material on the state enterprises being roughly launched in the second quarter of the nineteenth century and existed until the early twentieth century. The archival material mentioned here is composed heavily of accounting and expense books (*muhasebe ve mesarif defterleri*) of these enterprises enabling historians to see the scope of economic activities. In addition to the accounting and expense books, there are also certificate and summary books (*ilmühaber ve hülasa defterleri*) covering mostly the correspondences and negotiations among the responsible bodies partaking in the management of economic activities. In general terms, as being discussed throughout this study, this specific variety of primary sources may allow researchers to engage more with quantitative and qualitative aspects in dialogue with each other. If economic data can be seen silent since the numbers and short descriptions in the accounting books are not able to speak for themselves, the other sorts of non-numerical archival material obtained by a larger research and the issues they do and do not cover are rare, but yet lucky, instances to give a voice to the silent material and think on them. In other words, although I benefit from the economic data to great extent throughout this study, I do not confine my arguments only with numbers and thereby try to see economy and economic activities in relation with all documentable aspects of production process.

Apart from the aim of perpetuating the archival material, I consciously chose to study the agrarian state enterprises, or more specifically, the imperial landed estates (*çiftlikât-ı hümâyûn*) of Mihaliç since their foundation in the early 1840s and their performance up until 1850, for several reasons. First of all, the foundation of any sort of state enterprise seems remarkably valuable to see all sorts of economic motivations and mentality that any state has. The imperial landed estates, in this

regard, constitute a part of larger development plans because they were designed, launched, and financed by the Porte to domestically produce high-quality merino wool at lower rates which had been imported through international trade at higher rates. The wool to be produced by the landed estates, in turn, was expected to be transferred to the imperial factories (*fabrika-yı hümâyun*), which were located noticeably close to the imperial center. In other words, such an agrarian phenomenon necessitates the inclusion of manufacture into the picture because they constitute two inseparable stages of the development plan (i.e. import substitution) drawn and attempted by the Imperial State.

Second reason derives from the general characteristics of the nineteenth century economic and political history of the Ottoman Empire, which in the broadest terms has been argued as a turning point in terms of centralization, modernization, and bureaucratization. For instance, Tevfik Güran, who is an economic historian of the empire and who mostly deals with the state enterprises, asserts that the foundation of imperial state enterprises should be seen as one of the major steps toward strengthening the central bureaucracy from several perspectives. First, as a reflection of central-local power balances, the central bureaucracy took a step towards regaining the economic resources, and indeed its control over them because these resources were given rein to the local power holders as an outcome of the processes started as early as in the seventeenth century. Second, in fiscal terms, through lowering the rate of imports and relying more on domestic production, these projects meant that the treasury was strengthened by preventing the flow of money to outside the imperial economy. Third, in developmental terms, the state undertook massive industrial investments backed by certain incentives, especially in the century marked by widespread military modernizations and paved the way for further

development of economy. [1] In the light of these broad characteristics, or perhaps general descriptions, this micro study of the imperial landed estates by documenting and analyzing their accounting, certificate and summary books in detail, offers a chance to challenge and rethink the general trends, which are insufficient to explain "how" they became in effect. Put it differently, mostly due to the fact that the general trends describe the transformation of the Ottoman bureaucratic sphere in the nineteenth century, this micro level study aims to contribute to economic history of the empire by not appointing supplementary position to state-run enterprises as qualifiers or evidences of modernization or bureaucratization.

Third, within the scope of my study, the question of "how", which gives an anthropological character to my approach, sheds some light on the inseparable aspects of the production process itself. For example, the institutional setting allowing the imperial landed estates to come into existence and operate for a considerable period of time needs to be clarified to see how the imperial state diffuses at and around the local level and how it finances and coordinates an agrarian economic activity strictly dependent on land. Following the dependency on land, the use of physical space in which the economic activities are undertaken in accordance with a certain economic organization and mentality that the imperial state has, urges us to ask how the necessary human and extra-human labor were recruited and coordinated within the production process. Along with institutional setting, dependency on land, and the labor organization -all of which emphasize active human agency in various forms- the environmental challenges, such as epidemic diseases or flood, leads us to add another extra-human dimension to the production process and ask how these challenges were taken on and by whom.

[1] Güran, "Tanzimat Döneminde Devlet Fabrikaları," 235-237.

Fourth reason is related to and inspired by the recent discussions among geographers on the state space. These discussions situate and question "naturalization of state space … in modern societies".[2] I consider this naturalization as a serious problem, at least to be mentioned, in order to clarify in what ways that the micro study that I prose on the agrarian state enterprises can be a contribution to Ottoman historiography. Although it is not the major aim of this thesis to engage with the state theories, it seems necessary to underline that mainstream economic historiography in general does not differentiate modern states and imperial states from each other, or just reduces them to performance to be examined through macro, and often monetary, indicators. In this regard, my treatment of the imperial state in the middle of the nineteenth century, partly due to the "how" questions that I ask above, is not ahistorical. On the contrary, it challenges the issue of naturalization by giving primacy to the production process. Such primary enables me to consider the state as a historical and geographical formation in the making. Put it differently, the production process that starts with the foundation of enterprises and proceeds by the management of economic activities reveals the spatial and temporal anatomy of the Ottoman state. In a way, this study deals with the Imperial State on *work*.

1.2 State-centric versus state-focused historiography

Among many other challenges to be taken on by a historian, the tension between state-centric and state-focused historiography is of paramount importance for this study. It is this tension that shaped my extensive use and interpretation of the

[2] Brenner et. al., *State/Space* Reader, 2.

archival material obtained from the Prime Ministry Ottoman Archives. To be more specific, it is this tension that prompts an historiographical inquiry regarding how one can avoid ending up with a state-centric narrative while studying state enterprises. I do not think that there is a ready-made recipe to resolve this tension for once and all. At most, there might be suggestions that would alleviate the tension by making it intelligible and further debatable. My position with this respect is to be visible as an author as much as possible throughout the text. Rather than obscuring the tension by acting like it does not exist, I prefer keeping it alive by constantly reminding to myself.

One of the ways of reminding this issue, I think, is engagement with a broader discussion about historical and geographical origins of capitalism across the world. It may offer a historical materialist framework to employ a more state-focused, not state-centric, attitude towards the questions asked in this thesis. At this point, I find Alexander Anievas and Kerem Nişancıoğlu's contributions in *How the West Came to Rule* very helpful for several reasons. First, they are critical of Eurocentrism as a set of "three interrelated assumptions about the form and nature of modern development", which geographically particularizes (or imprisons) the origins of capitalist modernity as being "primarily *internal* to Europe."[3] Since this is a micro study on a state-backed economic enterprise in the Ottoman Empire in the mid nineteenth century, I believe that discussions and findings throughout can be related to, or considered as a contribution to, Anievas and Nişancıoğlu's objection to Eurocentrism. Second, the authors also invite to think of histories of capitalism, rather than *the* history of capitalism. In other words, rather than taking for granted the origins of capitalism in Britain as the sole and generalizable model for global

[3] Anievas and Nişancıoğlu, *How the West Came to Rule*, 4-5.

capitalism, they offer to study "*capitalisms* rather than capitalism."[4] This point seems extremely important for emancipating further studies dealing with geographies outside of Europe, by giving researchers more flexibility and autonomy to better assess possible particularities in and of different capitalisms. In a very similar sense, my approach to the imperial landed estates of Mihaliç through institutional, (political-) economic, and environmental lenses employs and enjoys the same flexibility and autonomy. Third, by acknowledging globalizing dynamics of historical capitalism, Anievas and Nişancıoğlu bring the interactions among geographies and economies together in the framework provided by theory of uneven and combined development. Originally coined by Leon Trotsky, the "unevenness" corresponds to the varying degrees of capitalist development among economies, and "combined" puts emphasis on the employment of tools and methods of relatively more developed capitalisms in less developed ones. Even more importantly, as the authors underline, "the outcome of this geopolitically interactive process was the creation of entirely new forms and modalities of development, producing 'amalgam[s] of archaic with more contemporary forms'."[5] I think that the geographies within and beyond the Ottoman Empire, which are mentioned and discussed in this study, again would be conducive to think them in the light of unevenness and combinededness.

Second way of reminding this tension is to simplify all complicated chains of events observable in the running of imperial landed estates of Mihaliç as different yet overlapping phases of a production process at the end of the day. Since wool production gives a dominant character and purpose to the establishment of landed estates, all relations, events, and processes may be considered as new dimensions

[4] Anievas and Nişancıoğlu, *How the West Came to Rule*, 9-10.

[5] Anievas and Nişancıoğlu, *How the West Came to Rule*, 48.

opened or unfolded by production of a commodity. At this point, Sven Beckert's illuminating study *Empire of Cotton: A Global History* provides many critical insights to be explored through cotton production for many centuries and more particularly from the nineteenth century onwards. Having considerable similarities with Anievas and Nişancıoğlu's objection to Eurocentrism and their employment of new approaches to the contemporary studies of capitalism, Beckert examines how the state and capital brought radical changes in cotton production during different phases of capitalism -or under "constantly shifting structure of capitalism"– in a global perspective. In this proposed global perspective, the main question then becomes how the Europe merged "the power of capital and the power of state to forge, often violently, a global production complex" and how many facades of cotton production (e.g. capital, know-how, networks, and institutions) came into play.[6] Despite the cotton's popularity in the nineteenth century, however, wool production can or should be seen as another global phenomenon in history of capitalism. Although I study wool among other commodities at a very regional scale, "from California to Patagonia and from Saxony to New Zealand" breeding merino sheep was certainly a global endeavor.[7] In this sense, my micro study of the imperial landed estates can be considered as a small chapter in the global reach of capital in the Ottoman Empire, which is discussed by a set of historical relations among state, capital, and environment.

On these notes, contrary to a state-centric stance characterized by assuming the state to be an omnipotent and omnipresent ideal, I follow a more state-focused

[6] Beckert, *Empire of Cotton: A Global History*, xiv-xvii.

[7] Kabadayı, "The Introductıon of Merino Sheep Breeding into the Ottoman Empire," 154. In a similar manner, Edward C. Clark also considers other state-backed entrepreneurial activities in the first half of the nineteenth century as Ottomans response to global industrialization, which happens to be through the transfer of knowledge, experts, and technology. See Clark, "The Ottoman Industrial Revolution," 66-70.

approach considering the state as a spatial and temporal formation. Since such choice does not automatically resolve and settle all tensions, I employ multiple units (or scales) of analysis accompanied by corresponding thematic periodization throughout this study. To exemplify this, take the period of this study, 1840-1850, as an example. On the one hand, from the perspective of strictly institutional and political historiography, such period can be considered as a temporal section marked by intensification of events often associated with modernization, centralization, and international trade. Among such events the ones that are counted most frequent are: The Treaty of *Baltalimanı* with the British Empire in 1838, declaration of the *Tanzimat* Edict in 1839, the establishment of the Council of Agriculture (*Ziraat Meclisi*) in 1842-3, the famous yet incomplete *temettuat* (land and income) surveys of 1840 and 1845 and so on. On the other hand, benefiting from the recent scholarship of environmental and climatic history, the decade of 1840-1850 can be seen as a tiny and late section in the long climatic cycle of Little Ice Age that would fade in 1870s. And, the study of the imperial landed estates, whose foundation dates back to the early 1840s, is instantly related both to the political and environmental histories of the empire. Such relation directly derives from the fact that these estates are creations of the imperial state and their creation has to do with the relative commercial and industrial (or manufactural) strength of the empire within the international division of labor in a century heavily dominated by international trade and industrialization. At the same time, it is an agrarian, and thereby an environmental and regional, process in which the state becomes *one* of the agents. The operational institutions that the empire employs at multiple levels, the measures that it takes to deal with the environmental challenges, the force it uses to recruit and assure labor supply through many extra-economic instruments, all signify and

display how the imperial state exists in a physical space by dictating a certain order, organization, and hierarchy among human and extra-human agents. Therefore, this study is not about a sterile, abstract, and unpolitical space of interaction or peaceful cohabitation or coexistence. Rather**,** it is a study of "space as a battlefield"[8], or the space in the making in the web of power relations.

1.3 Previous studies and methodology

The available literature on the landed estates (*ciftlik*s) in the Ottoman Empire suggests that the imperial estates, compared to the *waqf* and private ones, have been neglected or modestly studied. The previous scholarships usually focused on the disparities among definitions and correspondences of landed estates in the Ottoman Empire to understand whether they suggest private ownership on land and commercialization of agriculture along with their implications about the status of peasantry.[9] More specific to the imperial estates, a recent dissertation[10] written by Necmi Odabaşı focuses on the management of the imperial estates of Mihaliç through very broad lenses, and does not establish a dialogue between the previous literature and the imperial estates from an economic and critical perspective. Cafer

[8] Dussel, *Philosophy of Liberation*, 1.

[9] Keyder and Tabak, *Landholding and Commercial Agriculture in the Middle East.* The contributions within this volume approach the estate (*çiftlik*) phenomenon from different angles. However, probably in the lack of archival data or due to limited access to the Ottoman archives at that time, the general tendency in the volume is to discuss the phenomenon over individual examples of private estates mostly in the Western Anatolia and the Balkans.

[10] Odabaşı, "Çiftlikat-ı Hümâyûn of the Mihaliç and its Administration". This dissertation mostly surveys the imperial landed estates almost for a century. The chapters dedicated to economic aspects of the estates document the sources of revenues and costs, and looking at its evolution in the nineteenth and early twentieth centuries, rather than micro and qualitative analysis I employ in this study.

Çiftçi's article documents relevant but scattered information from the nineteenth century regarding the estates but it is limited to give an analytical perspective.[11] Another article, by İsmail Yaşayanlar, deals with the importance of stud farming in the region as a hub for supplying horses to the Ottoman army, however does not concern with the scope of agrarian production and organization in the region and in the form of a state enterprise.[12] Also, Atilla Aytekin uses the debt registers (*borç defteri*) of Mihaliç and Kirmasti from the early 1840s to see the patterns of indebtedness among Muslim and Christian peasantry in relation to the Ottoman central bureaucracy, as an overseeing and interfering actor.[13] Although making a contribution to the field, Aytekin does not mention the imperial estates of Mihaliç and misses the probable connections between indebtedness and the foundation and/or expansion of the imperial estates in the region. Therefore, the contribution of this study is, hopefully, to document and analyze the imperial estates of Mihaliç as one of the earliest examples of agrarian state enterprises in the Ottoman Empire.

From the view of institutional setting, the imperial landed estates of Mihaliç were not the only ones categorically corresponding to "çiftlikât-ı şahane".[14] There were other imperial estates in various regions of the empire, such as Istanbul, Edirne, Hayrabolu, Salonika etc., which were concentrated noticeably close to the imperial

[11] Çiftçi, "19. Yuzyilda Kirmasti'de Padişah Çiftlikleri."

[12] Yaşayanlar, "19. ve 20. Yüzyıllarda Kirmasti ve Mihaliç Kazalarında At Yetiştiriciliğine Dair Veriler," 375-396.

[13] Aytekin, "Cultivators, Creditors, and the State: Rural Indebtedness in the Nineteenth Century Ottoman Empire."

[14] BOA, *HH.d 72*, 113. "Emlak-ı Hümayun canib-i mülükaneden Mihaliçde kain çiftlikat-ı hümayun canib-i padişahinin …" The issue of categories is not usually so clear. The imperial landed estates of Mihaliç were included in the general category of imperial estates (*emlâk-ı hümayun)*, indicating they were estates (or properties) belonging to the dynasty. However, different than other landed estates, the ones in Mihaliç are certainly different due to its organizational purpose and activities.

center.[15] Among all, the ones in Mihaliç are remarkable because the available primary sources enable researchers to discover a model of organized agrarian production to supply wool input to imperial factories (*fabrika-yı hümâyun*). As Tevfik Güran notes, within the scope of the modernization in the nineteenth century, known as the vast array of *Tanzimat* reforms, the Ottoman state gave incentives to stockbreeding in order to domestically produce and supply high quality wool to the imperial factories in İslimye (Silven) and İzmit, and *Feshane*. As a form of such incentive, Güran states that the first wave of transferring 600 merino sheep from Rumelia to the estates around Edirne took place in 1839. It was followed by tax exemption to merino sheep for ten years starting in 1843 and, the second wave included the transfer of 300 breeding rams, primarily to imperial landed estates in Hayrabolu and Mihaliç.[16]

By managerial logic, my primary aim is to understand the mode of management of the estates as entrepreneurial initiatives. On the one hand, the institutional setting surely captures the managerial logic from the perspective of the imperial state, which is increasing the state revenues[17] and transferring input to manufacture. Moreover, without singularizing the Ottoman state in the nineteenth century, the local state institutions like the district level divisions of State Treasury (*kaza mal sandıkları*) and the district councils (*kaza meclisleri*), together with the central institutions like the division of imperial factories (*fabrika-yı hümâyunlar mal sandığı*), the Inner Treasury (*Hazine-i Hassa*)[18], the State Treasury (*Maliye*

[15] Güran, "İstanbul İaşesinde Devletin Rolü," 15-42. The closeness of these estates to the imperial center is remarkable given that the provision of İstanbul is a coordinated activity, as Güran argues.

[16] Güran, "Zirai Politika ve Ziraatta Gelişmeler: 1839-1876," 53.

[17] Terzi, *Hazine-i Hassa Nezareti*, 85.

[18] The exact translation of "Hazine-i Hassa" can be "The Sultan's Privy Purse" or "The Sultan's Treasury". However, for practical reasons, throughout the text I will use "the Inner/Imperial Treasury."

Hazinesi)[19], the *Waqf* Treasury (*Evkâf-ı Hümâyun Hazinesi*) and so on, give us a more complex, coordinated, and diffused picture of the central state. On the other hand, the imperial estates and their monthly kept accounting books, at the most local level possible, add another dimension to the mode of management issue, which is directly related to the human and economic geography.

On this note, economic performance implies the scale and scope of economic activities and their organization within the imperial estates of Mihaliç. Stockbreeding being the dominant economic activity, there was also remarkable agricultural production both to support the stockbreeding as animal feed through peasantry and to produce commercially valuable crops like sesame and tobacco through sharecropping or share tenancy. While wool was the major export good produced for the imperial factories, there was also petty commodity production like cheese, butter, and *bulgur* (cracked wheat) either for consumption or sale. The presence of wide range of economic actors, from the overseeing managerial officials to daily laborers, together with diversity in economic activities, in total, enables us to treat the imperial estates as a dynamic unit in itself.

The focus on the physical space within and around the estates, despite the fact that most entries in the accounting books have their cash equivalents (i.e. statistically analyzable), is to reconsider the whole estate management phenomenon from an environmental perspective which can, among many other possibilities, be defined as "mutual relations between humans and the rest of nature" by J. R. McNeill.[20] For instance, there are a lot of entries in the accounting books that give the descriptions and costs of materials used as medicine to heal sick animals in the estates. In addition

[19] In a similar manner, the exact translation of "Maliye Hazinesi" is "The Treasury of the Ministry of Finance." I prefer using "the State Treasury" again for practical reasons.

[20] McNeill, "Observations on the Nature and Culture of Environmental History," 6.

to being an economic indicator, medicine is a cause and effect at the same time. It indicates the epidemics, as a natural event and challenge, and human exposition and solution to overcome it with the available medical "technology". Or, there are a lot of repair and construction entries reflecting efforts to improve irrigation in the estates and river navigation to lessen costs of road transport. Therefore, any attempt to reduce these entries solely to the monetary costs would not allow us to discover historically unique aspects of the mutuality in human-nature relations.

1.4 Outline of study

In what follows, I argue that the imperial landed estates of Mihaliç should be analyzed on the basis provided by the concurrent employment of these four aspects, which are institutional setting, managerial logic, economic performance, and physical space. Each of them may be relatively autonomous from the others in terms of its own historicity. Nevertheless, they all come together and create a more complete picture drawn by a set of inseparable relations among all the aspects.

With that respect, in the second chapter, I document the establishment of the imperial landed estates in the plain of Mihaliç. Along with many relevant institutional events and changes, I discuss the general format of accounting books both to familiarize readers to the sources and unfold the network of institutions responsible in the running of estates. In doing so, in a network dispersed and diffused state institutions at local and central levels, I aim at showing which ones are important from the perspective of financing a state-enterprise away from the center. Moreover, I come up with several suggestions to trace the origins of mostly manual

labor employed in the estates through a critical engagement with some calculations in the accounting books. I also draw some emphasis on the unfavorable conditions in the plain of Mihaliç, which coincide with undertaking of a massive repair activity.

In the third chapter, I initiate my discussions by voicing climatic and geographical characteristics of the plain of Mihaliç more than other things to have a general idea about the characteristics of physical space in which production takes place. While I emphasize the climatic changes brought by the Little Ice Age and their setbacks in the plain, I also investigate the crop variety and multiple production processes for each individual landed estate within the complex of imperial landed estates of Mihaliç. For practical reasons, I separately examine the dynamics of agrarian production and stockbreeding in the plain. I combine and discuss all the details presented this chapter under the concept of environment-making, which simply refers to how capital brings human and extra-human nature to work in a certain order and for a certain end.

In the fourth chapter, I offer the concept of social metabolism (*Stoffwechsel*) as a historical materialist framework to present institutions, economy, and environment as interdependent constituents of a larger unity. Moreover, since I deal with primary documents carrying information about the social metabolism, I approach the process of account-keeping as another labor process in the imperial landed estates of Mihaliç. This enables me to discuss the characteristics of record-keeping by historicizing modes of market exchange, price formation, profitability, and capital accumulation. I also draw attention on the problems that I notice in the annual profit calculations and reporting in order not to take for granted the final calculations. Following discussions resting in the spheres of production, exchange, appropriation, and circulation, I conclude this chapter by asking who benefits from

the operations of the imperial landed estates, and where the potentials and directions of capital accumulation rest in the mid nineteenth century Ottoman Empire.

In the fifth and last chapter, rather than giving a conclusion in a nutshell, I present the major findings for each chapter and embark on a brief discussion of how they are related to each other one way or another. While discussing my findings and corresponding themes, I also note that there are more complex and complicated questions waiting to be answered by further studies inspired by historical materialism and political economy.

CHAPTER 2

ENCLOSING LAND, RECRUTING LABOR, AND SETTLING NOMADS

> "And yet what purses of gold the Padisah spent here! And what good might have been done to the country people if they could have had some of these Muscovite sheep!"[21]

From 1848, these words belong to a Greek tobacco cultivator at the gates of Gerdeme, one of the imperial landed estates of Mihaliç and Kirmasti. The addressee of this complaint is a British traveler, Charles MacFarlane, who travelled across the province of Hüdavendigâr in the late 1840s. MacFarlane visited almost the entire region from its southern end Kütahya to its north-western corner Bandırma (Panderma), and spent most of his time at the city of Bursa in the middle. This short conversation was indeed a lucky coincidence because the Greek cultivator appeared from nowhere while MacFarlane was almost giving up his hopes to see someone in "Sultan Abdul Medjid's far-famed *Merinos Establishment*".[22] What made MacFarlane's route happen to pass from Gerdeme were the laudations he heard from the Pasha of Bursa[23] regarding the imperial landed estates. And, the complaint the cultivator voiced was the exact thing that MacFarlane expected to hear, given his satirical style and critical attitude towards the implementations of the *Tanzimat* reforms in the countryside. Perhaps more than political prejudices that cause to take a dim view of everything, MacFarlane's interaction with the laboring and subsisting masses (indebted peasants, wage-laborers, nomads) of different ethnic and religious origins on the one hand, and the ruling and profiting minority (greedy landholders,

[21] MacFarlane, *Turkey and Its Destiny*, 512.

[22] MacFarlane, *Turkey and Its Destiny*, 511-512.

[23] MacFarlane talks about Mustafa Nuri Paşa, who was the governor (*vali*) of Bursa at the time.

corrupted state officials, loan-sharks, merchants) on the other, can tell a lot regarding the ideal and the actual.

Putting aside MacFarlane's invaluable comments and observations regarding the problems in the countryside, what is also interesting is the unpopularity of the imperial landed estates in the province of Hüdavendigâr. Apart from the chief-state officials, he almost hears nothing from the local inhabitants, neither positive nor negative, regarding the establishment. He travels almost every corner of the region and spends considerable time in the plain of Mihaliç, but does not bump into the imperial landed estates unless he intends to visit and then adjusts his route. It may be just a simple fact verifying the spaciousness of the plain in which the settlements are scattered and they fall apart from each other. Or, it may imply that "the purses of gold" and the "Muscovite sheep" should be kept safe by enclosing the establishment. Although MacFarlane unhesitatingly calls the imperial landed estates as "enclosures"[24] visible in the physical space, throughout this chapter I will discuss the state machinery and human geography within the "enclosures," which may not be accessible to any "outsiders" at the time.[25]

In this chapter, spared to the institutional setting and earlier phases of human geography, I first document and discuss how the imperial landed estates, as an example of state enterprises in the Ottoman Empire, are established and financed. These two points are remarkably important to see how the Imperial State diffuses at and around the local level to run the enterprises. The majority of archival material I use throughout the chapter comes from the accounting and expense books of the imperial landed estates. Along with my minute study of these books, I explore the

[24] MacFarlane, *Turkey and Its Destiny*, 511.

[25]Throughout, I use the term "enclosure" in a very specific way and differently from the historical English experience the term "enclosure" is usually associated with. I discuss my use of the term in greater length at the end of this chapter.

ways that the central state recruits and manages necessary labor required for undertaking the economic activities, by benefiting from administrative documents. Moreover, I show that such labor recruitment practice means more than "logistics" of production, and it reflects larger, and often forced, settlement patterns employed.

2.1 Establishment of the estates and their accounting books

There has been an ambiguity in the available literature regarding the exact establishment date of the imperial landed estates of Mihaliç. İsmail Yaşayanlar states that they were initiated for stud farming in 1815, to breed and supply horses to the imperial center.[26] All other studies imply that the state presence, in various forms and for certain ends, is definite in the plain of Mihaliç, but these studies do not qualify the establishment of the estates. The one and most obvious reason for the continuous presence of the state in the region is related to the category of the lands on which the estates are established. As Necmi Odabaşı notes that the land had been known as "*havass-ı hümâyûn*," or imperial "*has*"es, which is a broad category of revenue-generating economic sources on which the dynasty, viziers, and high-rank state officials had a direct share and control. Within the early days of the *Tanzimat* period, these *havass-ı hümâyûn* were transferred to the State Treasury (*Maliye Hazinesi*) and such transfer was likely to mark the beginning of more systematic control and management of the economic resources which had been more familiar, at least categorically, to the central bureaucracy.[27][28]

[26] Yaşayanlar, "19. ve 20. Yüzyıllarda Kirmasti ve Mihaliç Kazalarında At Yetiştiriciliğine Dair Veriler," 375-377.
[27] Odabaşı, "Çiftlikat-ı Hümayun of the Mihaliç and its Administration," 2-3.

In order to lessen the ambiguities and pinpoint the exact date of the imperial landed estates of Mihaliç, primary documents support that the preparations for the establishment took place somewhere around 1843-44 (1259)[29], roughly four years after the *Tanzimat* Edict, one year after the establishment of the Council of Agriculture (*Ziraat Meclisi*), and two years before the famous *temettuat* (income and tax) survey that the imperial central planned and attempted to conduct across the empire, but happened to be limited with certain regions.

The documents regarding the establishment of the estates reveal interesting details about the preparation process and the total value of initial costs. For example, the first chief-director of the estates, Ahmed Şaban Efendi, was the former tax-farmer (*mültezim*) of the Çobankırı *mukataası*[30], and was paid 152,500 *guruş* by the *darbhane*[31] to give up his usufruct rights.[32] In the first run, the estates bought 9473

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[28] By benefiting from the *kanun* of Hüdâvendigâr province dated as early as 1573, Ömer Lütfi Barkan also notes and discusses some articles specifying some regulations of imperial "*has*"es in Mihaliç. See Barkan, "XV. ve XVI. Asırlarda Osmanlı İmparatorluğu'nda Toprak İşçiliğinin Organizasyon Şekilleri," 615-617.

[29] BOA, *HH.d 66*, 30. "Mihaliç ve havalisinde kain çiftlikat-ı şahanenin mu'acelatıyla bidayetinden [1]261 kanun-ı evvelinden [12]62 senesi şubatı nihayetine kadar ba-irade-yi seniye-yi hazret-i şahane mübayaa olunan demirbaş ve ağnam ve hayvanat ve ecnas-ı zehair bahasıyla memurin maaşı ve ırgad ve hayvan ve ücûrat ve mesarifat-ı vakı'ası olub canib-i darbhane-yi 'amireden bi'l-defa'at ita buyrulan mebaliğin mikdar ve kemiyeti mübeyyin ilmühaberdir."

[30] Genç, *İslam Ansiklopedisi*, 129-132. At the most basic level possible, the term, in this context, can be explained as handing over the usufruct rights of the state or *waqf* lands to the tax-farmers (*mültezim*). However, it cannot be limited to the land. As a form of contractual relationship, the state can lease other sources of revenues, like the customs. Ariel Salzmann's study is instructive for documenting and discussing different meanings and implications of the *mukata'a* in the different regions and political settings of the Ottoman Empire. Salzmann, *Tocqueville in the Ottoman Empire*, 57, 87.

[31] Terzi, *Hazine-i Hassa Nezareti*, 17-21. Terzi notes that with the *Tanzimat* edict the Ottoman state decided to make the State Treasury (Maliye Hazinesi) the primary treasury. In 14 August 1846, parallel to the reforms in fiscal institutions, the name of the Inner Treasury, which was known as *Ceyb-i Hümayun* (or the Sultan's Privy Purse) then, was changed to *Hazine-i Hassa* or the Imperial Treasury.

[32] BOA, *HH.d 66*, 30. 8 April 1848 (4 Cemaziyelevvel 1264). "Mihaliç kazasında Çobankırı mukataası münasib-i mevki'ası cihetiyle çiftlikat müdiri Ahmed Şaban Efendi tarafından iltizam olunmuş olduğundan mukataa-yı mezburenin [12]59 senesi bedeline ve çiftlikatta kullanılmak üzere irsal olunan tâlika bahasına verilen".

sheep, from Crimea[33] and Ottoman Bulgaria (Filibe/Plovdiv and İslimye/Silven), whose cost was 678,975.5 *guruş*. In accordance with this purchase, there were also 36 shepherd and wage-laborers recruited from Filibe (Plovdiv) to serve in the estates.

Since the phrase "the imperial landed estates of Mihaliç," as implied earlier, corresponds the complex of the estates, we also see the purchase of individual estates with their fixtures and crops (i.e. possibly with their inhabitants also) which totally cost 567,592 *guruş*. The names of six estates included within this purchase were Büyük (Big) Gerdeme, Küçük (Small) Gerdeme, Çörekli, Orta Çiftlik, Melde, and Gönü. In addition to them, there were two more, Akçasığırlık and Canbazlı, leased from the *Waqf* of Laleli in return of 6814 *guruş* annual rent for each estate.[34][35] In the early days of the imperial estates of Mihaliç, we also see regular visits from different state officials for inspection and investigation. For example, in 1845-46 (1262) Nesib Paşa, a member of The Military Council (*Dâr-ı Şûra-yı Askeri*), visits the estates with a clerk (*kâtib*).[36] In the accounting books, there is only information regarding the Paşa's visits to the region between 1844 and 1846 and the sum of his travelling expenses. In a document dated 5 June 1845, it is seen that he, together with the council clerk (*divan katibi*) Raşid Efendi, owns the estate of Kayseriye, which is a part of a local *waqf* in the district of Kirmasti. Raşid Efendi sells the land, buildings, animals, and other things to the imperial estates in return of approximately 122,000 *guruş*, in the supervision and approval of the *waqf* notables (*erbâb-ı vukuf*) and the

[33] BOA, *HH.d 66*, 30. 8 April 1848 (4 Cemaziyelevvel 1264). The purchase of sheep from Crimea was done by the Ottoman envoy of Spain.

[34] BOA, *HH.d 66*, 30. 8 April 1848 (4 Cemaziyelevvel 1264). In the year 1845-46 (1261), the rent paid by the *Darbhane* to *Evkaf-ı Humayun Hazinesi* (the *Waqf* Treasury) was 27,256 *guruş* that amounts the rent of two years. This detail is also in line with proposing that the date of foundation is 1843-4 (1259).

[35] See Figure A1. for a map of the plain of Mihaliç.

[36] BOA, *HH.d 66*, 30. 8 April 1848 (4 Cemaziyelevvel 1264).

representative sent by the director of imperial buildings (*ebniye-yi hassa müdiri*). The reason for this transaction is explained as to fulfill the need of imperial estates for a place where the lamb can be bred and protected in the winter.[37]

Given the massive initial costs summing up nearly to 1,500,000 *guruş*[38] and the earlier inspection and investigation of the region by the assigned state officials, it would not be hyperbolic to say that the state had great and serious expectations from establishment of the imperial landed estates of Mihaliç. Together with these expectations, it should be also noted that the establishment of the estates does not happen from a scratch. Put differently, the earlier transfer of the land to the State Treasury and the appointment of former tax-farmer as the first chief-director of the establishment gives an impression that the state fictionally, or legally, redefines and reallocates its economic sources at the same time. And, when it comes to acquiring land, the state gets in an immediate contact with the people and institutions more familiar to itself, and the most foreign one among them can be seen as the Imperial *Waqf*s (*Evkâf-ı Hümâyûn*), but still being imperial in origin and definition.

Massive in volume, serious in expectations, and easy in acquiring the land, the events and facts covering the scope of investments and preparations, so far, give

[37] BOA, İ.DH 114/5760 7 February 1845 (29 Muharrem 1261). "Mihaliç kazasında kain çiftlikat-ı hümayunda mevcud ağnamdan husule gelen kuzuların teksiri cihetiyle mevsim-i şitada muhafazalarıçün münasib bir mahal tedariki lazımeden ve müceddeden inşası bir takım tekalif ve mesarifi muceb olacağı umur ve vahimeden bulunduğuna ve evkaf-ı hümayun hazinesinden mazbut Şehr-i Ergan evkaf-ı şerifesi müstaglatından Kirmasti kazasına tabi Kayseriye nam karye hududuna serasker-i sabık devletlü paşa hazretlerinin divan katibi … Raşid Efendinin mutasarrıfi olduğu bir kıta çiftlik tarla ve merası salif'ül-beyan çiftlikat-ı hümayun arazisiyle orada muhafazası esbab-ı istikmal olunacağına binaen ebniye-yi hassa müdiri efendi tarafından gönderilen memur ve sair erbab-ı vukuf marifetiyle çiftlik-i mezburun arazi ve ebniye-yi mevcudesi ve hayvanat ve kaffe-yi edevatı led'el-muayene 1 yük 21.150 bedel misüllü…"

[38] Although the initial costs accrue to 1,500,000 *guruş* for the establishment of the imperial landed estates of Mihaliç in the fiscal year of 1843-4, the proportions of agrarian and industrial investments within the state expenditures may be useful to see a more complete picture. For example, for the establishment of Zeytinburnu Iron Factory in 1847-8, the state spends 50,722,833 *guruş* and the total expenditures in the same year reach to 71,219,851 *guruş*. In 1848-9, the central state plans to spend 32,577,039 *guruş* for its enterprises in general. And, as Tevfik Guran notes, the central state had planned to create funds up to 600,000,000 *guruş*, and the sum of these two fiscal years reach to 104,000,000. Tevfik Güran, "Tanzimat Döneminde Devlet Fabrikaları," 236.

a part of the story regarding the establishment of imperial landed estates of Mihaliç from the perspective of central bureaucracy. Consistent with all of these, the accounting books of the estates can be considered unique for their content and continuity. They may allow researchers to study them up until the early twentieth century. However, within the scope of this study, I strictly limit myself with the period of 1840-1850. It is partly because of practical concerns, given the volume of the accounting books kept on monthly basis. A century-long study of them would not be feasible at this point. But, it is more about the nature of questions that I ask. The choice I made by studying relatively short period of time, enables me to get a picture of the state and the knowledge and practice associated with running of enterprises. Therefore, I treat the accounting books both as quantitative and institutional source to come up with some answers to how the state machinery works at central and local levels.

2.2 Record keeping as a tension between real and fictional

2.2.1 Monthly records: coexistence of nominal and natural entries

In addition to being detailed, the accounting of books of the imperial estates are not immediately available for an analytical study. In terms of their format,[39] there are two levels of calculations. First and the most voluminous one is monthly records, which can be separated into two major sections as nominal and natural. In the nominal section, every expense, from purchase of a single spoon to the wages of

[39] See Figure 1 and Figure 2 on pages 27 and 28 for the categories in primary sources and after reorganization of entries.

managerial officials, is recorded in cash and organized in at most eight distinct categories, such as purchase of consumption goods, individual expenses, purchase of fixtures, other expenses, expenses in summer pastures or highlands (if it is the time), wages of managerial officials, wages of shepherds with steward, and wages of laborers with steward.

The most difficult aspect of tackling nominal section is categorical shifts. For instance, given that there are originally three wage categories (wages of officials, shepherds, laborers), the daily wages paid for seasonal and/or occasional laborers are recorded usually in the category of "other expenses". This means that the original labor categories in the accounting books are insufficient to see a more complete picture of labor costs in the estates. Another example for such shift is about repair activities. These activities are usually included in the "individual expenses" category and recorded without a full description. Therefore, it is almost impossible to be sure whether the amount paid for a specific repair activity is totally a wage of a repairman or partly the cost of purchasing necessary tools and other stuff to repair something. There are two possible ways to overcome such impasse: (i) one is regarding the cost of each repair activity as wage, and hence labor cost; (ii) second is taking such activities as depreciation costs. I will consider repair costs as labor costs because in the lack of reliable data of initial stock of fixtures or anything reparable, it is hard to draw conclusions on depreciation.[40]

In the end of the nominal section, all expenses made in a given month are calculated, and if there are any revenues for that month, they are subtracted from the expenses. In all cases, monthly revenues are considerably less than the expenses and such calculations, to be precise, give the net expenses. Therefore, this conclusion in

[40] We only know the initial total cost of fixtures of several individual estates, however in the monthly records, the repair entries do not specify the location of item.

the nominal section indicates that the preponderant motivation behind the monthly records is keeping expenses meticulously.[41]

The second section, which is the natural one, does not record any monetary expenses or revenues. It would not be wrong to say that this section is designed for distributional purposes and it varies too much in each month. The unchanging ones, however, are the estimation, description, and distribution of payments in-kind (*tayinat*) for laborers, shepherds, some share tenants, the in-kind payment of chief-shepherd, and the weight of grains used as feed for animals. From month to month, it is possible to see the weight of grain as feed given to sick animals and tobacco and salt used as medicine for sheep and so on. Being not directly mentioned in the primary sources, this section depicts an operational role of the estate's storehouse (*anbar*) because the monthly grain purchases (if any) recorded in the nominal section does not match with the amounts given for animals as recorded in this section. However, the goods specifically *purchased* for the in-kind payments of chief-shepherd, or the goods *distributed* as the in-kind payment of chief-shepherd, can be found both in nominal and natural sections verifying each other in quantity. In other words, the estates purchase consumption goods on each month, whereas they store and distribute the grain used as animal feed.

[41] Kula, *An Economic Theory of the Feudal System: Towards a Model of the Polish Economy 1500-1800*, 34-5. In his inspiring study of the feudal "enterprises" by benefiting from the accounting books of Polish estates, Witold Kula notes that "It is possible that in pre-capitalist periods extra-economic elements enter into calculation more often –but neither are these elements together foreign to the calculations characteristics of capitalism." Although it is hard to describe the Ottoman imperial estates either as feudal or capitalistic, the mode and format of their accounting books may suggest the coexistence of feudal and capitalistic elements in the management and organization of the estates. Since the calculations in the monthly records always give the net expenses, this point further supports Kula's argument that the estates, as enterprises, are operating at loss if calculations in the accounting books are confined to the monetary expenses. Furthermore, the term "accounting books" (*muhasebe defteri*), in the case of the imperial estates of Mihaliç and due to the calculations of the net expenses, can be renamed as "expense books" (*mesarifat defteri*) on the monthly basis.

This is the record, kept [*tanzim kılınan*] by the Council of Mihaliç, of expenses of the Imperial Estates located at Mihaliç and its vicinage, took place between the beginning and end of … [month] in the year of …

Date of Issue [if any]

NOMINAL SECTION

[2] Individual Expenses
Great variety of expenses, from repair of sth. to animal shoes, and pottery (unit price and unit of purchase is usually given)

[1] Purchase of grains [*mübaya'at- zehair*]
Purchased weight, unit price, sum, and sum total is given for each grain or other products

[4] Other Expenses
Pretty much everything, like currycomb, animal shoes, hay, duty-based payments to officials, travel expenses

[3] Purchase of estate fixtures (*demirbaş*)
Like barrels, knives of mill etc.

[5] Expenses in pastures [if it is the time]
medicine for animals, cost of transportation of necessary food supplies, travel expenses etc.

[6] Wages of Officials
Estate director, clerk, storehouse official, chief shepherd [usually fixed for each month]

[7] Wages of shepherds with steward
Shepherds and stewards also, bread-maker, miller, and miller apprentices and

[8] Wages of laborers (*ırgad*) with stewards
Directors of smaller estates, stewards, laborers of different kind, carrier etc.

Sum of all above ….

Minus
Revenues [if any] ….
Net Expense - the amount to be provided by local *mal sandığı* -

NATURAL (in-kind) SECTION

[11] Estimation and distribution of in-kind payments (*tayinat*) for laborers and shepherds and others

[10] Estimation and distribution of in-kind payments (*tayinat*) for laborers and shepherds and others

[9] Weight of grains as animal feed
Usually for sick animals, or for ones in highlands

[13] In-kind payment for chief-shepherd

[12] Monthly total weight of in-kind payments distributed in the estates
bread, olive oil, butter, mutton, olive, wheat etc.

Figure 1 General format of keeping accounting books

Nominal/Monetary Section of Monthly Records After Reorganization

[1] Purchased Good
1.1 Olive Oil
1.2 Olive
1.3 *Pekmez* (syrup of grape juice)
1.4 Sugar
1.5 Vinegar
1.6 Coffee
1.7 Candle
1.8 Butter
1.9 Mutton
1.10 Rice …… [and so on]

[2] All Fixtures
2.1 Animal Equipment
2.2 Kitchen Utensil
2.3 For the Use of Shepherds
2.4 Wool-specific ones
2.5 General Gear

[3] Stockbreeding and Husbandry Specific Expenses
3.1 Horse-specific
3.2 Water buffalo and oxen-specific
3.3 Animal Medicine (mostly sheep)
3.4 Extra Animal Feed
3.5 Animal Purchases
3.6 Rent for Pastures (if any)

[4] Repair and Construction Expenses
4.1 Repair of Kitchen Utensil
4.2 Repair of Mill
4.3 Carriage/Wagon repair and maintenance
4.4 Drainage
4.5 Repair of Animal Gear
4.6 Repair of General Gear
4.7 Small Constructions (e.g tent)
4.8 Minor Maintenances

[5] Labor Expenses
A. Permanent Labor
5.1 Managerial Officials
5.2 Stewards and Shepherds
5.3 Baker and Miller
5.4 Managers of Individual Estates
5.4.1 Chief-stewards
5.4.2 Estate Officials
B. Seasonal Labor
5.5 Reaping (maize
5.6 Picking (sesame, beans, tare)
5.7 Weeding (grass)

C. Occasional Labor
5.8 Wages paid in repair activities
etc.

[6] Transportation Costs
6.1 Round-trip between pastures and the landed estates
6.2 One way to the estates
6.3 Round-trip to İstanbul
6.4 Round-trip to Ayazağa *Çiftlik*
6.5 Between İnegöl and *Çiftlik*
6.6 Between Bursa and *Çiftlik*
6.7 Cost of hiring boats
6.8 Cost of hiring carriage
6.9 Unspecified transportation costs

Annual Section After Reorganization

[1] Annual Produce of Individual Estates
A. Primary Crops
1.1 Wheat
1.2 Barley
1.3 Oat
1.4 Tare
B. Commercially Valuable Crops
1.5 Tobacco
1.6 Maize
1.7 Sesame
1.8 Onion
1.9 Garlic

[2] Rents and Taxes Paid

A. To State Treasury
2.1 Tithe in-kind
2.2 Tithe in money

B. To the Treasury of Imperial Waqfs
2.3 Rents of Individual Estates

[3] Annual Revenues
3.1 Revenue from rented lands
3.2 Sales of Wool
3.2.1 Merino
3.2.2 Hybrid
3.2.3 Anatolian
3.2.4 Mohair
3.3 Other Sales
3.3.1 Cheese
3.3.2 Olive
3.3.3 Olive oil, butter etc.
….

Figure 2 Categories after reorganization of monthly and annual record

2.2.2 Annual records: Unfolding institutional setting

The other level, in addition to monthly records, is the annual one, appearing right after the last monthly record. At the most basic level, annual entries can be organized in four general categories as total agrarian produce, revenues, transfers, and expenses. In the agrarian produce category, produce of each individual estate for different crops is separately listed in weight, and by multiplying with the respective prices (*rayiç-i vakit*)[42], their cash equivalents are found. The revenues section includes several entries such as the rent obtained by the fields leased to peasants in some estates, revenue from selling old animals through auction or market prices in the end of fiscal year[43] and, revenue from selling if the estates produced something. The transfers category directly notes the kind, weight, and unit prices of wool produced in the estates and transferred to the imperial factory in İzmit. The category of expenses, however, is the most remarkable one because it unfolds institutional

[42] BOA, *HH.d 617*, 10, 3-9, 13-17, 53-65. The issue of prices used in calculations is quite ambiguous because it is hard to be sure whether they are prevailing market prices or the prices set or manipulated by the central state, Istanbul. Although it will be discussed in the Chapter 4 more in detail, the term "rayiç-i vakit", or the rate of prices in a period, can imply both of them to a certain extent. For instance, in the year of 1848-49 (1264), it is noted that the respective annual calculations were made according to the prevailing prices (*cari fiyat*) in the region several months ago. "Zirde muharrer zehair ve saire birkaç mah mukaddem mahalinde cari olan fiyat ile hesab olunmuş …" This can lead to raise two interpretations. First, the estate authorities may have a right to choose a specific level of prices rather than the actual prices of the time. Second, the local or regional prices are not subject to change for several months. In the category of "the grain purchases", however, for most of the goods, there are noticeable changes in prices from month to month, which may support the first interpretation.

[43] BOA, *HH.d 617*, 3, 4, 11, 14, 16, 55, 62, 65. In addition to the annual sales of animals, there are also some sales recorded on the monthly basis. From the records, it can be seen that the buffalo cow is the most valuable animal, which is followed by the buffalo bull. More remarkably, there are also varying prices of animals depending on the purpose of use, either for milking or drafting. For the draft animals, it is frequently mentioned that they are old (*ihtiyar*) enough to be sold. And, related to the age, there are also sales of animal skins, usually of water buffalos, which indicate that in most cases, the power of cattle is exploited as much as possible. Regarding the small cattle, the estates sell the large amounts of them to the butchers. In addition to them, there are also sales of turkey and goose, obviously for consumption. The issues of exploiting the cattle as much as possible and of the prices of animals are parallel with Alan Mikhail's findings in the Egyptian countryside, which arise the question and importance of the forms of labor and energy in the turn of the nineteenth century. Mikhail, "Unleashing the Beast: Animals, Energy, and the Economy of Labor in Ottoman Empire," 327-8.

complexities, hierarchies and novelties regarding the management of the imperial estates.

These complexities can be best decomposed by adding two perspectives, tax payment and rental relations, into the picture. Regarding tax, the imperial estates, despite of being state enterprises and regardless of supplying wool for imperial factories, are not exempted from paying the tithe out of their annual produce to the State Treasury (*Maliye Hazinesi*). Since the imperial estates of Mihaliç consist of eight individual estates, four of them, in two pairs, are different in status. For example, the Gönü and Melde estates are villages at the same time. It means that a small part of these villages, as local administrative units, is not subjected to the management of imperial estates. Therefore, the tithe to be paid by the village is calculated separately from the estate's fiscal responsibilities. And quite interestingly, although the chief-manager of the imperial estates for the period of this study, Halil Efendi,[44] is directly responsible for the taxes to be paid by the estates, he represents the state in collection of the tithe of these villages.[45] As to rental relations, other two estates, Akçasığırlık, and Canbazlı, resemble a contractual relation between the managements of estates and *waqf*s. The imperial estates lease these two estates from the *waqf* of Laleli. Therefore, as an annual expense, we see that the imperial estates

[44] BOA, *HH.d 72*, 110. 1 January 1851 (27 Safer 1267). After his service in the imperial landed estates of Mihaliç, Halil Bey was appointed to the directory of coal mines in Ereğli. Halil Bey's appointment also highlight that the roles played by the middle- and low-rank bureaucrats (i.e. not viziers or pashas) in the Ottoman state when it comes to coordinate, supervise, and monitor an economic activity.

[45] BOA, *HH.d 617*, 10, 66. "Gönü ve Melde karyeleri ahalisi mezru'atının aşar-ı mahsusu olarak … çiftlikat-ı merkume müdiri Halil Efendi marifetiyle idare ve tahsil olunmuş olan aşar-ı mezkurenin mikdar ve bahası olarak hazine-i maliyeye itası icab eden"

pay annual rent for them and the tithes of these *waqf* estates are calculated separately, and then transferred to the *Waqf* Treasury (*Evkâf-ı Hümâyûn Hazinesi*).[46]

2.2.3 District level divisions of state treasury (kaza mal sandıkları)

The operational role of the district level divisions of state treasury (*kaza mal sandıkları*) is the most crucial to understand how the imperial estates, as a model of state enterprise, finance their expenses. Since the primary role of the estates is to supply wool to the imperial factory in İzmit, any obstacle in production process, such as the spread of epidemics among the animals or the lack of enough pastures for the flocks in summer, should be overcome by the estates to avoid irrevocable damages. Therefore, these local divisions, among many other administrative and economic responsibilities in the districts, seem like the vault and guarantor of the estates. By going back to the accounting format, there may be several possible interpretations about the role of these divisions.

Firstly, in the end of nominal section, right after calculating the amount of net expenses for a given month in cash, it is noted that the amount is taken from the Mihaliç division of the State Treasury by note.[47] Put it differently, the estates spend money to cover their enlisted money expenditures in each month and submit them to the district division after which the District Council (*kaza meclisi*) verifies the documents and informs the central bodies. Mostly in the annual section, we see that the Inner Treasury (*Hazine-i Hassa*), either directly or through the Division of

[46] BOA, *HH.d 617*, 10, 66. "Akçasığırlık ve Canbazlı çiftliklerinin aşarı olarak aynen müdiri Halil Efendi ma'arifetiyle verilen zehairin mikdarı"

[47] BOA, *HH.d 617*, 3-19, 13-17, 53-65. "Kusuru Mihaliç mal sandığından ba-sened ahz olundu."

Imperial Factories (*Fabrika-yı Hümayunlar Mal Sandığı*) -being administratively autonomous and yet financially being the division of the Inner Treasury[48]- transfers the sum or a part of yearly expenses compensated by the local divisions to the State Treasury (*Maliye Hazinesi*). During the period of the monthly records studied here, between 1847-1850, although the imperial factories and estates are designed to increase state revenues[49] and ultimately financed by the Inner Treasury, the State Treasury has its supremacy in collection of all sorts of revenues and authority to distribute the money that categorically belongs other fiscal and financial institutions. In the light of these, the relationship between multiple state institutions, both central and local, can be called temporary inter-institutional borrowing without an interest. Therefore, within this framework, the character of the most local level transactions traceable in monthly records appears as a mere reflection of the bureaucratic division of labor when the accounts are settled annually.[50]

Secondly, at the local level, abstracting the annual transfers among the central state institutions for a moment, the relationship between the estates and the local divisions of State Treasury, raises the question of credit and subsidy at the same time. The estates, as entrepreneurial units, do not have an initially independent budget to

[48] Terzi, *Hazine-i Hassa Nezareti*, 17-20, 81-96. Arzu Terzi's study of the foundation of the Imperial Treasury as a replacement of the Sultan's Privy Purse (Ceyb-i Hümâyûn) verifies this complex web of cash flows.

[49] Terzi, *Hazin-i Hassa Nezareti*, 85.

[50] BOA, *HH.d 72*, 114. The bureaucratic division of labor in the financial transactions and organization should be further studied and discussed. Echoing the problems associated with the prevailing prices (*rayiç-i vakt*) in the accounting entries, what primary sources suggest is that the cash is not transferred immediately among the central and local state institutions. In other words, all nominal calculations may be named as "payment orders", which are to be asked from each other if one institution needs its cash receivables stocked in another institution. In one of the entries, for example, the State Treasury (*Maliye Hazinesi*) asks its balance (probably tax revenues) stocked in the imperial factories. A mediatory figure to undertake such transfer, Tokadlı Oğlu Höce Agob, takes the money but does not deliver it to the State Treasury because the imperial factories owe him a certain amount of money. This apparently leads to problems, and the Treasury informs Agob's brother and (business) partner Höce Tomas in Istanbul. Among many possibilities, the mechanism of "payment orders" may cause many financial shortages for the treasuries and great opportunities for capital accumulation for these mediatory figures.

cover the costs of their activities. They have to borrow money from the district divisions of state treasury to pay back in the end of every year. In this scenario, the district division appears as a local branch of public bank, whose capital is composed primarily of collected local taxes, giving loans to the estates and the estates pay back when annual production and revenues are *realized*. However, the lack of interest rate on borrowing is not compatible with naming such transaction as credit. Rather, it suggests a form of direct subsidy for the estates to the degree that they become inseparable from the local divisions. Such inseparability, therefore, is one of the crucial aspects that make the estates a form of state enterprise and a radically distinct category from any other (non-state) agrarian enterprise on land.[51]

In both cases, the whole setting is apparently in the benefit of the estates. Efforts to increase state revenues originally stocked in the Inner and State treasuries, through promoting agrarian and industrial production, are dependent on the well-functioning of the estates in the first hand. Such primacy over the estates justifies their importance as suppliers of input, i.e. wool, to the imperial factories. In this regard, the institutional boundaries between two treasuries become blurred at the local level. They are better- or worse-off depending on the tune between the estates and factories. And, ultimate better-off is assured by an initial warrant of generous purchasing capacity to the estates through the district level divisions of State Treasury.

Although institutional setting describes the mechanism of finance both at central and local levels, which in turn enables me to treat the imperial state both as a

[51] The district division of State Treasury (*kaza mal sandıkları*) is also important to understand the foundation of agrarian banking sector in the Ottoman Empire. Although it would be wrong to say the district divisions of State Treasury had directly evolved to the banks, the divisions certainly offered an alternative model of creating credits to support peasants and rural production. Until the foundation of Ziraat Bank in 1888, there had been several attempts to create local credit mechanism echoing the model discussed in the text. For more information: Atasağun, *Türkiye Cumhuriyeti Ziraat Bankası: 1888-1939*, 1-22. And, Hüsrev, *Türkiye Köy İktisadiyatı*, 134-193.

fragmented and diffused entity, the design or envisage of the financial and fiscal mechanism cannot tell the whole story for several reasons. First, it has already become clear that the estates, as the "enclosed" venues of production initiated by the imperial center, have a right to generously spend money stocked in the district divisions of the state as long as they notify the central authorities and enlist meticulously each expense item in the accounting books on the monthly basis. Second, given the structure and content of the annual calculations, the money spent throughout a fiscal year at the local level turns out to be solely about a redistribution of funds among the treasuries. In other words, the only tangible money taken and spent is likely to be the collected taxes at the local level. The central level transfers among treasuries are only about the intangible money, or payment orders, reported in sums and the transfers are just about a simple reflection of which treasury has the right to collect and store the taxes. Moreover, contrary to the *real* transactions at the local, there is a certainly *fictional* or *virtual* element at the central level. Third, along with the fact that this real-fictional duality complicates the monetary dimension, the coexistence of natural and nominal elements in the running of the enterprises always draws the utmost attention on the non-monetary dimension of the economy, that is the production process, or more precisely, the relations of production.

2.3 Estate economy as multiple production processes

As already became apparent in the previous sections, the imperial landed estates can be considered simply as *another* stage of larger institutional setting launched by certain economic motivations and directed towards certain economic ends. Although

this consideration is remarkable to reveal the state mechanism behind an agrarian or industrial enterprise in the nineteenth century Ottoman Empire, it does not automatically invite the regional dynamics, or the physical space in general, into the analysis. Also, given the potential shortcomings of strictly monetary analyses imposed by the institutional setting, the imperial landed estates of Mihaliç should be considered as a unit in itself to see the relational dimension of production process.

Within the realm of the relations of production, the estates contain multiple production processes at the same. Even the wool production occupies a central role, the agrarian production and diversity of crops highlight the fact that several economic activities were undertaken within the estates. Thus, this multiplicity, more than just a simple proof of diversity in economic activities, stands as an issue, to be delved deeper into the sources and composition of labor employed within the estates. It is the sources of labor and labor organization that would allow us to start establishing a connection with the physical space and transcending the rigid boundaries drawn and operational roles attributed by the institutional setting.

2.3.1 Recruited Bulgarians and contracted chief-shepherds

In line with the "Muscovite sheep" that the Greek cultivator mentions in the epigraph, it has already known that the estates received great numbers of merino sheep from Crimea and Rumelia to breed and supply wool input to the factories. To coordinate and accomplish this labor- and land-intensive economic task, I observe that the primary labor force specialized in stockbreeding in the estates is not composed of the inhabitants living in Mihaliç and Kirmasti region. Rather, they are the Bulgarians

recruited[52] from the villages of Filibe (Plovdiv) and annually transferred to the estates to work either as shepherds or wage-laborers. The records show that each migrant worker was monthly paid 62 *guruş* in cash, received a basket of goods in return of their services, and was provided a shelter to live (Table 1).[53]

Table 1. Monthly Numbers of Registered Bulgarian *Irgad* - Wage-Workers

1848/49	Shepherd	Wage-Laborer	Total	1849/50	Shepherd	Wage-Laborer	Total
March	47	27	74	March	61	38	99
April	46	27	73	April	62	38	100
May	46	27	73	May	61	38	99
June	46	27	73	June	58	38	96
July	46	27	73	July	58	38	96
August	46	27	73	August	54	37	91
September	46	27	73	September	54	37	91
October	46	27	73	October	54	37	91
November	45	42	87	November	55	41	96
December	45	42	87	December	50	40	90
January	45	42	87	January	51	41	92
February	62	38	100	February	58.5***	39	97.5

Source: BOA, *HH.d 617*, 3-19, 13-17, 53-65. *** The decimal means that in the period of annual shift odd number of workers worked odd working days.

The reason for the increase in number of workers in February is the annual shift system.[54] Around the middle of each year, a new group of employees recruited

[52] The issue of whether they were forced to work in the estates, or willingly went to work is ambiguous.

[53] BOA, *HH.d 617*, 3-19, 13-17, 53-65.

[54] BOA, *HH.d 72*, 110-116. In these registers, it is noticeable that most of the entries states the procedures and problems about the annual recruitment and shift of Bulgarian labor force in Filibe and Pazarcık. They are expected to arrive at the estates 25 days before *ruz-ı kasım* (November 9). Until the early 1850s, it seems that each year 90 shepherd and wage laborers came to the estates, and they were elected accordingly to their skills and durability. More interestingly, in such entries, the major problem is labor flight. The estate authorities decide to take two measures to lessen labor flights in the following years. One is to increase the wages from 62 *guruş* to 100 *guruş*; and other is to assign a local guarantor (*kefil*) to each worker coming from Filibe to compensate the losses of the estates**,** such as prepaid travelling expenses or losses caused by the absence of labor during the stockbreeding etc.**,** in the case of flight. This local guarantor (*kefil*) system may be conducive to discuss whether there had been a long-lasting or an emergent bonded labor regime in the plain of Mihaliç.

from Filibe arrives at the estates. The estate authorities select the ones suitable for working conditions, and thereby they partly renew or replace the migrant labor force.[55] In the years of this study, 1846-50, the records indicate that there was a state official, Ahmet Ağa, responsible for bringing Bulgarian workforce to the estates, and their travelling expenses were provided by the Filibe Division of State Treasury (*Filibe kazası mal sandığı*). It is not surprising that the expenditure made by the Filibe division is recorded in the accounting book of Mihaliç. This point emphasizes the fiscal coordination among the divisions as acting like local branches of State Treasury.

This labor recruitment practice arises two questions and possible interpretations. First, one may ask whether such practice reflects the scarcity of labor in the region. Tevfik Güran asserts that the labor was a scarce factor compared to the relative abundance of land in the Ottoman Empire and it caused unequal distribution of factors despite of the limited efforts of the State to balance it.[56] Thus, the labor recruitment may mean the State's measure to reinstall labor balance in the region, but in this case, not in response to the already distorted land-labor ratio, but as a self-response to bringing merino sheep to the estates. Second, even it is said to be a form of self-response, the recruitment practice is not arbitrary, rather it directly and systematically targets the laborers in Filibe. Therefore, reminding us the seriousness of expectations from the estates, the employees recruited from Filibe seems to imply the transfer of relevant know-how rooted back in Rumelia. In other words, the

[55] BOA, *HH.d 19258*, 2. There is a labor record (*künye*) dated 1865/1280, as a list of incoming Bulgarian workers from Filibe, with their original villages or neighborhoods as well as their physical descriptions and family information. Although the date of this record does not match with the period of study, it highlights two things. First, the labor recruitment practice in the estates had lasted for considerable amount of time. Second, the workers were chosen from many villages or neighborhoods of Filibe (Plovdiv) and Pazarcık, not specifically from one region.

[56] Güran, "Osmanlı Tarım Ekonomisi," 67–8.

transfer of sheep, as a means of production, in turn, requires the transfer of labor capable of utilizing it.

To support this point, Charles MacFarlane in his travel account, for instance, observes that the great numbers of Bulgarian shepherds and laborers are present in the plain of Mihaliç, but he does not directly witness their presence in the imperial landed estates. Moreover, even MacFarlane has a disturbingly pejorative tone while mentioning the Bulgarians as slow and unskilled, it is clear that what makes them favorable for the landholders in the region is their compliance to work with the difficult terms.[57] As long as the primary documents concerned, unlike MacFarlane's observations, the Bulgarian labor force that the estates recruit is constituted among the ones chosen from the Rumelia. Or, they are not the Bulgarians with unknown origins and looking for employment in the region on their own. Also, among the managerial officials in the estates (See Table 2), the title and position of "chief-shepherd" (*çobanbaşı*) is remarkable for shedding some light on other aspects of stockbreeding. Even though there is no fixed job description mentioned in the primary documents, we can say that the chief-shepherd has two major responsibilities: the coordination of stockbreeding and healing or finding remedy for sick animals (sheep and others). Cafer Çiftçi notes that there was a number of chief-shepherds, mostly non-Ottoman in origin, with whom the estates had worked on a contractual basis to improve physical and physiological conditions of animals.[58] This position seems to be first occupied by an Ottoman non-Muslim named Kigork in 1847.

[57] MacFarlane, *Turkey and Its Destiny*, 418, 440-42.

[58] Çiftçi, "19. Yüzyılda Kirmasti'de Padişah Çiftlikleri,"148.

Table 2. *Maaş-ı Memurin* - Monthly Wages/Salaries of Top-Managerial Officials in *guruş*

1848/49	Müdir (Chief-Director)	Katib (Clerk)	Anbarcı (Stock-Keeper)	Çobanbaşı (Chief-Shepherd)	Tercüman (Translator) *
March	2000	250	150	1500	500
April	2000	250	150	1500	500
May	2000	250	150	1500	500
June	2000	250	150	1500	500
July	2000	250	150	1500	500
August	2000	250	150	1500	500
September	2000	250	150	1500	500
October	2000	250	150	1500	500
November	2000	250	150	1500	500
December	2000	250	150	1500	500
January	2000	250	150	1500	500
February	2000	250	150	1500	500
1849/50	Müdir (Chief-Director)	Katib (Clerk)	Anbarcı (Stock-Keeper)	Çobanbaşı (Chief-Shepherd)	Tercüman (Translator)*
March	2000	250	150	1500	500
April	2000	250	150	1500	500
May	2000	250	150	1500	500
June	2000	250	150	1500	-
July	2000	250	150	1500	-
August	2000	250	150	1500	-
September	2000	250	150	1500	-
October	2000	250	150	1500	-
November	2000	400	150	1500	-
December	2000	400	150	1500	-
January	2000	400	150	1500	-
February	2000	400	150	1500	-

Source: BOA, *HH.d 617*, 3-19, 13-17, 53-65.

Kigork was followed by Prussian Tekman, then Russian Toma, and ended up with Austrian Matej (ماتز) in 1848.[59] The story of the Russian shepherd Toma is quite revealing because he arrives at the estates while accompanying a flock of

[59] Çiftçi, "19. Yüzyılda Kirmasti'de Padişah Çiftlikleri,"148-149.

merino sheep sent from Crimea to the estates[60], and he becomes the chief-shepherd for promising healing sick animals, but unfortunately fails to do so.[61] The position of the chief-shepherd, therefore, should not be confused with an ordinary supervisory responsibility. Rather, it stands in the intersection of veterinary expertise and managerial ability. Table 2 supports this point because right after the chief-director, the chief-shepherd, here Austrian Matej, receives the second highest wage among managerial officials.

In the natural section of accounting books, in addition to the cash payment, there is a basket of goods, composed of mutton, butter, olive oil, bread, sugar, coffee, candle etc., given to Matej the chief-shepherd as his monthly payment in-kind. Moreover, there is an entry, in the section dealing with the distributions of grains as animal feed, showing the amount of horses he has and their monthly consumption of barley and oat. Since Matej did not speak Turkish,[62] we can guess that multiple number of horses means that he travels at least with one translator,[63] and the payment in-kind may be at least for two. Because of this inseparability, as indicated in Table 2., the translator is included in the category of managerial cadre, who is originally listed in "other expenses" in the accounting books.

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[60] BOA, *HH.d 66*, 30. In the primary sources giving the details of the establishment of the estates of Mihaliç, we see that the cost of purchasing Crimean sheep and their transportation cost amounts 218,602.5 *guruş*.

[61] BOA, *HH.d 66*, 27. After the failure of Russian Toma, the arrival of Austrian (Nemçeli) Matej is quite interesting. Barutçubaşı Höce Ohannes/Avannes/Evans, who is a very critical figure in the coordination of the estates and the factories, brings Matej to the estates. Matej examines the sick animals several times and assures the estate authorities that he can cure them. Also, Marc Aymes mentions a Prussian family, the Mattei family, who had strong connections and landholdings in Cyprus in the nineteenth century. See: Aymes, *A Provincial History of the Ottoman Empire*, 94-101. Although I cannot confirm or prove a direct connection between Matej and Mattei family, this point requires further attention and investigation to see whether there are interregional connections between Bursa and Cyprus.

[62] Çiftçi, "19. Yüzyılda Kirmasti'de Padişah Çiftlikleri,"148.

[63] BOA, *HH.d 255*, 89B-90. 23 February 1847 (7 Rebiyülevvel 1263). "Mersum Matej Türk ve Bulgar lisanlarını bilmediğinden bi't-tedarik terfik olunan Bedros nam tercüman 62 senesi kanun-ı sanisi ibtidasından itibaren mahiye 500 guruş maaş itasıyla istihdamı …"

In the light of all, the practice of stockbreeding in the estates is obviously a transregional phenomenon. It encapsulates animals, expertise knowledge and practice, and laborers of different regions. Along with the fact that the wool production has a noticeable primacy in the establishment of the estates, the major labor force including the recruited shepherds and wage-laborers from Filibe and also the chief-shepherd highlights that the central state initiates a production process whose constituents are not already available in the plain. Together with such regional unavailability of resources and generous purchasing capacity envisaged by the institutional setting, it should be further problematized whether the imperial landed estates of Mihaliç can fit into the category of "enclosure" or not. Before discussing it, I think that it is necessary to look at the sources of regional labor and their relation to the running of the imperial landed estates to have a broader understanding of the region.

2.4 Tracing the sources of the regional labor

Compared to the combined and cyclical character of labor recruitments in stockbreeding, it would be fair to assume that agrarian production in the imperial estates, to support stockbreeding and husbandry in general and to produce commercially valuable goods (like maize, sesame, tobacco), was undertaken by the local populations settled in Mihaliç and Kirmasti. However, it is hard to be sure about the exact number, composition, and source of agrarian labor force within the estates. Or, it is not for sure whether the labor in the estates is bonded to land or there has been a looser relation with the region. The accounting books of the imperial

estates give hints, which could be used to trace the origins of labor, and a broader archival research enriches the possibilities.

2.4.1 Repair activities and limits of nominal wage perspective

It is highly probable that the agrarian production in the estates, not in terms of its cash value but of its volume, did not reach the level enough for covering some payments in kind as soon as they were founded in 1843 (1259). For instance, in 1845-46 (1262), there is an entry stating that the cost of 200 *kile* wheat purchased from Istanbul as to produce bread as a part of in-kind payment for the shepherds and wage-laborers who were recruited from Filibe.[64] However, there is no such entry in the accounting books after 1846-47 (1263). Instead, we see the costs related to the active use of mill and production of wheat bran (*kepek*) to be given to sheep especially in the summer pastures.[65] In a supportive manner, in 24 April 1847 (1263) the chief-manager of the imperial estates, Halil Efendi, receives a medal (*nişan*) for two reasons: one is his accomplishment of the construction of mill in the estate of Gerdeme from scratch at 4379 *guruş*, being considerably lower than the estimation of the central state, which is 11,386.5 *guruş*. And the other is his leading role in the prevention of epidemics among sheep.[66] The latter estimation is nearly three times of the former, and, among many things like boosting the costs for manipulative reasons, it may imply an extensive use of the estate labor in repair activities.

[64] BOA, *HH.d 66*, 30. "Çiftlikat-ı şahanede müstahdem çoban ve amelenin nân-ı aziz mekûlatıçün dersadetten mübayaa olunan 200 kile hıntanın esmanı olarak verilen fi 9 cemaziyelevvel sene 62 [5 May 1846]."

[65] BOA, *HH.d 617*, 3-19, 13-17, 53-65.

[66] BOA, İ.DH 106/8336, 24 April 1847 (8 Cemaziyelevvel 1262).

In September/November 1849, there is an entry in the accounting books stating a repair activity started in December/January 1847/48 and lasted twenty months. This massive repair includes the betterment of the drainage zone, renewing bricks, construction, and general maintenance of the estates. The cost of this repair is visible in the accounting books as a steep increase in the expenses and it diverges from the general trend describing the monetary expenses of the estates (Figure 3).

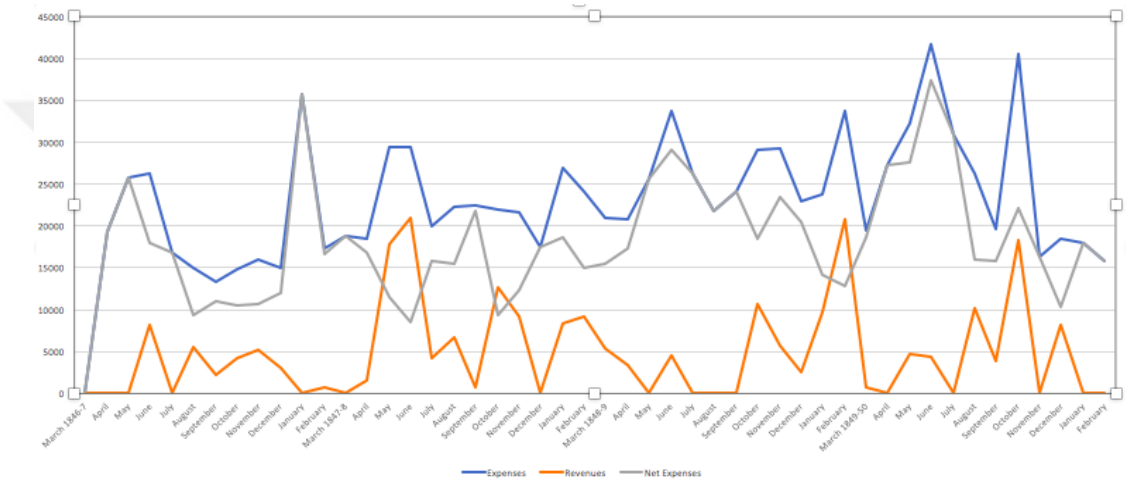


Figure 3 Expenses, revenues, net expenses between 1846 and 1850

More importantly, from the total cost of the repair, which is 60,000 *guruş*, 12,500 *guruş* is subtracted because the workers (*amele*) of the estates carried timber and stone by the carriages to the construction zones when they were free *(hâli)*. The subtracted amount is described as a reduction under the name of the cost of transportation.[67] Moreover, this calculation raises some critical questions and interpretations. First, from the accounting perspective, the reduction may be simply based on the cost of hiring carriage in the region. If it is the case, in the records, the monthly wage paid for the estate carrier (*arabacı*) is 125 *guruş*. To reach 12,500

[67] BOA, *HH.d 617*, 65. "Çiftlikat-ı Hümayunun araba ve amelesi hâli kaldıkları vakitlerde getirmiş oldukları taş ve kerestelerin ücret-i nakliye namıyla tenzil idüğü …"

guruş, one carrier together with his carriage must be hired for 100 months, whereas in this case the repair lasted only 20 months. It means that there may be 5 carriages working at the same time probably in the different estates, which makes sense because they are considerably far from each other. However, it is not convincing because using solely carriages would not be logistically sufficient to undertake such massive repair activity.

Second, in other entries showing the cost of transportation, the descriptions generally mention the carrier or carriage, not workers. Therefore, it is more likely to interpret this reduction from benefiting the level of wages in the accounting books. I use the daily wages paid for manual labor for weeding and plucking of specific crops as an approximation because it can be assumed that the loading and carrying timber and stone require similar skills. In most cases the daily wage paid for such low skill activities is 3 *guruş*. Since the workers spent their labor in free times, i.e. there is an unfree time, the ratio of a working day, in terms of the balance of free and unfree times, should be specified. Let us assume that the 2:3 of a working day is unfree, and 1:3 of it is free, and the daily wage is 3 *guruş* for a single workday. In this case, the wage corresponding to 1:3 of the working day is 1 *guruş.* In a repair activity lasted 20 months, or nearly 600 days, if the workers served every day, the aggregate of one worker is 600 *guruş*. To reach 12,500 *guruş*, there should be around 20 workers, but it is not still convincing because now the use and cost of carriage is neglected, and it is ambiguous whether 20 workers would add up to the sufficient labor force for this activity.

Any attempt to detect the number of workers in the estates, as in this exemplary calculation, is totally dependent on certain assumptions like the ratio between free-unfree time, the amounts of daily wages, and the wage system itself.

The ones who made these calculations may have taken different reference points for the reduction. For instance, in the lack of monetary payment as wages, if the workers served in return of payment in kind or of subsistence, we can draw radically different conclusions regarding the exact number of workers, which is not, or cannot be, apparent in the accounting books.[68]

2.4.2 Settlement of nomads and immigrants: Potential labor force?

In the year of 1843, there are two important events traceable at the Ottoman Archives, which are quite revealing in terms of the land-labor ratio in the region. First of all, in the document dated 8 February 1843, the Council of Agriculture (*Ziraat Meclisi*) discusses the settlement of nomadic tribes (*aşayir*) living in the plain of Mihaliç with other state departments. The Council decides on the settlement of 150 households of nomads as a village within the imperial estates of Mihaliç. There are two reasons for it. First, it is stated that the arable land within the imperial landed estates, despite being abundant, is empty due to the scarcity (*kıllet*) of labor in the plain.[69] Second, different than the land-labor aspect, is that with the settlement of nomads, the improvement or construction (*imar*) of the imperial estates would be possible from

[68] Interestingly enough, around September/October 1846, there is only one explicit use of the category of "amele" (worker) in the summary and certificate books. BOA. *HH.d 616*. 83. "Koyun çobanlarından ve kayhalarından başka çiftlikat amelesi yani hayvanat-ı saire içün sığırtmaçlık ve bazı aşağı yukarı kullanılmak üzere lüzum görünen amele nihayet on beş [15] miktarı olduğu surette kafi olacağından bunların tertibi … ve elbise bahalarının senevisi ne kadar olmak icab eder ise meclisce müzakere ve tanzim olunarak suret-i halin bu canibe tahrir ve izbarı ve fazla … olan ameleye ruhsat verilmesi ve bu suret koyun çoban ve kahyalar haklarında icra olunmayub çiftçi ve ırgad denilan amele hakkında icra kılınması …" This specific document seems quite important because it directly reveals a body of bonded labor to be used in various tasks.

[69] BOA, İ.MSM 69/2003, 1. 8 February 1843 (8 Muharrem 1259). "Malum-ı samileri buyrulduğu üzere Mihaliç ovasında kain çiftlikat-ı hümayunun havi olduğu arazi her ne kadar vâsi ve münbit ise de nüfus-ı mevcudesinin kılleti cihetiyle ekser mahalleri ziraatten hâli olduğundan çiftlikat-ı mezkur civarına şimdilik bir yüz elli hane mikdar 'asayirin karye vechle iskanıyla oraların tiz elden istihsali ..."

then on, which clearly shows that the state considers the settled nomads as a source of labor to be used in the future. However, there are not too many details in this document specifying what the Council of Agriculture means by the improvement or construction of the region.

In the second document, dated 25 October 1843, there is a totally different picture of the plain of Mihaliç, which may link all repair costs to each other. More than 40 villages in the districts of Mihaliç, Kirmasti, and Manyas were inundated due the flood originated from the overflow of river waters to the Lake of Apolyond (Ulubatlı/Apollonia) eight or ten years before the date of the document. The flood caused damage to the fields and pastures of estates in the plain, and they were not recovered until 1843.[70] In the document, it is stated that the repair activities would cause suspension of passages in the strait of Mihaliç causing a decrease in the customs revenue. One reason for postponing the repair of weirs and dams, therefore, may emphasize the importance of trade and commerce in the region letting the state receive the customs revenue. Furthermore, another reason for deciding to undertake this repair may be related to the establishment of the imperial landed estates in Mihaliç, as a space and initiative of stockbreeding and agriculture. In the light of the primary sources, therefore, it seems that the state is in favor of securing trade-related

[70] BOA. İ.DH 80/4029, 1. 25 October 1843 (1 Şevval 1259). "Mihaliç ovasına Apolyond gölünden enhar-ı saireden cereyan eden suların sed ve bendleri sekiz on seneden berü tamir olunmamasıyla mar'ül-beyan Mihaliç kazasıyla Kirmasti ve Manyas kazaları kurasından kırkdan mütecaviz karye tarlalarına ve dahilinde bulunan çiftlikat meralarına iras-ı hasar etmekte olduğundan mahal-i merkumeyi bi'l-muayene tamiri mesarifini keşf etmek üzere memur ve tayin kılınmış olan mühendis Salih Efendi … " In a supporting manner, another document from 1879 verifies the overflow of rivers forty of fifty years before (i.e. 1830s-40s), and notes the emergence of swamps afterwards which causes the spread of diseases in the plain of Mihaliç. "Mihaliç kazasının bundan kırk elli sene mukaddem varidat-ı öşriyesi elli yük guruşa karib iken o havaliden cereyan-ı enharın mürur-ı zaman ile mecraları dolarak mevsim-i şitada kesret üzere nüzul eden suları isti'ab edemeyib ovaya tecavüz [ile] pek çok arazi-yi mentebe su altında kalmasından ve ovaya yayıların suların ihdas ettiği bataklıkların ta'affünat-ı tabi'yesi oraların havasını ihlal ve tesmim ederek her vakit mühlik surette hastalıklar zuhur etmesinden naşi …" BOA. ŞD.TMZ. 25/2. 10 September 1879 (29 Ağustos 1295).

revenues until 1843, and after that, the trade-off between trade and agriculture dissolves in the benefit of the latter.

In another document dated 6 July 1845, there are 60 households of Crimean immigrants (*muhacir*) who want to settle in the district of Mihaliç, and demand permission from the central state. After the correspondences between district council of Mihaliç and the central bureaucratic bodies, the voluntary settlement of Crimean immigrants is approved, and they are exempted from all fiscal responsibilities for three years except the tithe. It is also noted that the state would supply animal and seed for those who are in need of them.[71] Although the document specify that the Crimean immigrants would be settled as a village, similar to the case of nomadic tribes, they may constitute a part of labor force, along with being a population and cultivation potential in the region.

2.5 The estate division and allocation of manual labor

So far, the labor force in the estates is discussed by benefiting from the repair activities –as approximations- recorded in the accounting books, and the settlement practices documented at the ministerial level. The problem of invisibility of direct producers, unskilled or semi-skilled wage-laborers, and peasants in and around the

[71] BOA.İ.DH 106/5370, 1. 6 July 1845 (1 Receb 1261). "Kırım muhacirlerinden dersadette ve sair şurada bulunan altmış kadar hane Mihaliç kazası dahilinde hâli olan mahallere iskan etmek arzusunda olduklarından ve ruhsat itası mukaddema istirham olunarak … bu makule iskan istidasında olanlara bila-sahip bulunan araziden hane inşası ve hububat zer'i zımmında lüzumu mikdarı mahalin bila bedel terk ve tahsisiyle …ibtida-yı iskanlarından itibaren üç sene müddet yalnız 'öşr alınıb tekalif-i saire mütalebe olunmaması ve içlerinden hayvan ve tohum itasına ihtiyacı teyit edenlere iane-yi icabiyesinin icra kılınması ve iskan oldukları mahallere tenkisat-ı mülkiye usulüne tatbiken tahrir-i nüfus nizamına tevfiken iktizası bi'l-ifa defterlerinin bu tarafa gönderilmesi nizamı … ". The phrase "tenksat-ı mülkiye" is of great importance to re-start the political and fiscal applications of *Tanzimat* after the meeting participating in bureaucrats and notables of the regions in the Empire in 1845. For further information: Ünver, "Tanzimat Taşrasının İstanbul Buluşması: İmar Meclislerinin Kurulması Süreci," 119-160.

imperial estates complicates any attempt to come up with the right estimation and condition of agrarian labor and its organization. Furthermore, the real question becomes whether the estates were self-sufficient in terms of their labor capacity to be employed in stockbreeding, repair and maintenance, and agricultural production.

For stockbreeding, there had been the annual recruitments since the early days of the foundation of the imperial estates. Almost all records about the animals, personnel responsible of them, and medicine were recorded in great detail. Given the primacy of stockbreeding over other economic activities, it is fair to assume that the labor in stockbreeding occupies a central role and relatively independent position in the total labor force, which may provide the conditions for less exposition to serve in some unrelated tasks. Regarding repair and maintenance, there should not be a separate reserve of labor force for such activities because in the aforementioned examples, it highlighted that the estate workers spend their labor in their free times, i.e. they do something else in the unfree time. Thus, the repair entries are helpful not for the scale of labor in the estates, but for the qualification of the relations of production. Yet, it can give clues about the labor force in agriculture, contrary to the primacy of labor in stockbreeding.

The production estimate for the crops such as wheat, barley, oat (*alef*), and tare (*burcak*), which are essential for the estates due to the intensity of stockbreeding, may be complementary to understand the scope of agriculture and the agrarian labor force altogether. In Table 3, there is the level of production from 1846 and 1850. In the first two years, between 1846 and 1848, the produce of these four crops is at its highest. In the third year, their production shows a steep decline, when the production in the year of 1848-49 is almost 1:3 of the previous year. In the fourth year, 1849-50, the production almost doubles the previous year, but 2:3 of each of

first two years. Since the production of different crops may differ from each other with regards to labor requirements, the fluctuations in the production of wheat, barley, oat, and tare can be crosschecked by the production of crops like tobacco, maize, sesame, onion, garlic, where we do see the share-tenancy. In Table B1, it can be seen that there is a similar decreasing trend in the production of more labor-intensive and commercially valuable goods. Moreover, the yearly proportional changes are steeper than the fluctuations in the production of essential goods. I argue that such imbalance in the agrarian production is related to the allocation of the estate labor among repair, maintenance, and agrarian activities.

Being mentioned earlier, the period of the decline in agrarian production coincides with massive repair activity lasted 20 months between December/January 1847-8 to September/November 1849. The other possibilities like plant diseases and flood do not seem plausible. If the cause was the disease, it is likely to be recorded in the accounting books, given the importance of agriculture both for the estate and the tithe-collecting central state.[72] A possibility of flood is also weak, because in the early days of the establishment of the estates, there was a vast array of measures taken by the state to improve the land and pastures in the valley of Mihaliç, which was inundated due to the flood occurred around 1833-35.

[72] BOA, *HH.d 72*, 112. In this regard, for example, in 2 June 1852 (1268), it is mentioned that the grasshoppers caused damage and loss to the produce. "Mihaliç kazası havalisinde kain çiftlikat-ı hümayun canib-i mülükane arazisine çekirge düşerek bi'l-cümle hububat ve saireyi telef etmekde olduğu çiftlikat-ı mersume müdiri tarafından ba-şukka beyan ve bunun esbab-ı mümkünesi var ise de bi'l-cümle aza-yı meclis ve ahali-yi kaza ile bi'l-ittifak tesbit olunmasına …"

Table 3. Production Estimate for Primary Goods Produced in the Estates

1846-7*	Wheat (in *kile)*	Barley (in *kile*)	Oat (in kile)	Tare(in *kile*)	1847-48**	Wheat (in *kile)*	Barley (in *kile*)	Oat (in kile)	Tare (in *kile*)
Orta Çiftlik	71.5	37.5	92	14	Orta Çiftlik	1182	1040	1110	245
Gerdeme	110	2	71	17.5	Gerdeme	815	1142	961	207
Çörekli	39	69	83	6.5	Çörekli	678	608	660	175
Gönü	63	48.5	16	3.5	Gönü	391.5	240	83.5	25.5
Melde	37.5	15.5	5	2	Melde	269	284.5	8	30
Kayseri	33	13	15	3.5	Kayseri	238	168.5	130	69
Akçasığırlık	82.5	21.5	13.5	0.5	Akçasığırlık	285.6	395	114.5	30.5
Canbazlı	47	4.5	7	1	Canbazlı	247	104	37	35.5
Annual Produce***	4502.89	1953.46	3049.07	473.14	Annual Produce	4106.1	3982	3104	817.5
Tithe to State Trs.	354	185.5	282	47	Tithe to State Trs.	379.5	373.5	294	83
Tithe to Waqf Trs.	129.5	26	20.5	1.5	Tithe to Waqf Trs.	62.5	49	14.5	6
Tithe as % of Production (S)	10.20	10.53	9.94	10.01	Tithe as % of Production (S)	10.61	10.72	9.95	11.04
Tithe as % of Production (W)	12.53	13.45	9.55	37.80	Tithe as % of Production (W)	11.73	9.81	9.57	9.09
Net Annual Production	4148.89	1767.96	2767.07	426.14	Net Annual Production	3726.6	3608.5	2810	734.5
Total Purchase	-	-	-	-	Total Purchase	-	-	-	-
1848/49[73]	Wheat (in *kile)*	Barley (in *kile*)	Oat (in kile)	Tare(in *kile*)	1849/50[74]	Wheat (in *kile)*	Barley (in *kile*)	Oat (in kile)	Tare (in *kile*)
Orta Çiftlik	205	375	725	108	Orta Çiftlik	573	450	820	380
Gerdeme	270	230	1140	160	Gerdeme	512	420	720	276
Çörekli	241	410	520	146	Çörekli	540	1020	560	360
Gönü	206.5	224.5	179.5	64	Gönü	489	595	373	143
Melde	122.25	117	88.5	6	Melde	131.5	157	28	40
Kayseri	112.75	80	30	12	Kayseri	57	340	0	11
Akçasığırlık	134	39.5	16.5	55	Akçasığırlık	311	190	45	0
Canbazlı	92	69	0	0	Canbazlı	244	83	5	10.5
Annual Produce	1383.5	1545	2699.5	551	Annual Produce	2857.5	3255	2551	1220.5
Tithe to State Trs.	115.5	144.5	266.5	45.5	Tithe to State Trs.	230.5	323	249	119
Tithe to Waqf Trs.	27.5	10.5	1.5	5	Tithe to Waqf Trs.	76	57	5	10
Tithe as % of Production (S)	9.97	10.05	9.93	9.17	Tithe as % of Production (S)	10.01	10.83	9.95	9.83
Tithe as % of Production (W)	12.16	9.67	9.09	9.09	Tithe as % of Production (W)	13.69	20.87	10	95.23
Net Annual Production	1268	1400.5	2433	505.5	Net Annual Production	2627	2932	2302	1101.5
Total Purchase	437.5	255	700	433.5	Total Purchase	709	598.5	434.5	160

Source: * For the year 1846-7 (1262) there is only the tithe estimation for each individual estate. Therefore, the entries in the first table correspond to the tithe estimated. BOA. *HH.d 66*, 27. ** BOA. *HH.d 557*, 90. *** In the lack of production data for 1846-7 (1262), I used the average percentages of tithe given out of the production separately to the State Treasury and the *Waqf* Treasury in the following three years, and estimated the annual produce for 1846-47.

[73] BOA. *HH.d 617*, 10.

[74] BOA. *HH.d 617*, 66.

The allocation of the estate labor, therefore, may have strong implications for the relations of production and environmental challenges at the same time. For the former, the status of manual labor in the estates may swing among the explanations offered by theories. For example, one may think of the peasant labor in the estates as in the Chayanovian "family farm," which can be defined concisely as the domination of "the requirement of satisfying the needs of each single production unit, which is, at the same time, a consumer unit" in a natural economy.[75] In the model of the family farm, the major tension lies at the border between the tendency to subsist through the product of the family labor and the pulse to produce surplus either as to cover the deficit in the product of family labor or to produce for the market. The Crimean immigrants, who were settled in the district of Mihaliç (i.e. not in the estates) and to whom the state provided seed and animal, may be similar to the Chayanovian family farm. However, the nomads, because of their direct settlement into the estates, cannot qualify the theory of family farm. Although the drive of subsistence can be common for the nomads as in the case of the Crimean immigrants, the estate, as an institution and management at the same time, determines the level of subsistence and working conditions of labor. And, environmental factors, stimulating or paralyzing, shape a considerable part of the managerial decisions as in the allocation of estate labor in the repair activities. From that perspective, it is hard to talk about a single theory of peasantry and labor in the estates independent of the institutional organization and managerial logic of the estates.

[75] Chayanov, "On the Theory of Non-Capitalist Economic Systems," 1-28. In Ottoman historiography, Halil İnalcık's *çifthane* system resembles great similarity with the Chayanovian family farm. Indeed, İnalcık discusses the *çifthane* system with direct reference to Chayanov. See: İnalcık "Village, Peasant and Empire," 155. Also, not in direct dialogue with İnalcık but with Ömer Lütfi Barkan, Vera P. Moutafchieva points out the problems in Ottoman historiography when it comes to the conceptualizations of the relation between the small peasantry and state in the fifteenth and sixteenth centuries. See: Moutafchieva, *Agrarian Relations in the Ottoman Empire in the 15th and 16th Centuries*, ix, 140.

2.6 The degree and definition of enclosure?

Remarkably different than the available literature on the imperial estates of Mihaliç, this chapter dealt with the abridgment of the factual and archival information in the accounting books with the theoretical questions. With that respect and from an institutional perspective, the estates within the state mechanism are both revenue-generating initiatives for the treasuries and strategical enterprises to supply the wool input for the imperial factories. In addition to this institutional setting being conducive to grasp the critical constituents of the managerial logic from the state perspective, it is argued that the operational role of district level divisions of the State Treasury is crucial for supplying the generous purchasing capacity in the functioning of the estates at the local level.

Not to content my analysis with the institutional setting which is drawn mostly by the expected monetary transfers among the state institutions both at the local and central levels, I introduced the relations of production, at a sketchy level, to see a non-monetary dimension to the whole estate phenomenon. Within the presence of multiple production processes marked by stockbreeding and agriculture in general, it is argued that the estates take measures and develop strategies both at regional and interregional levels. While the recruitments and transfers of the employees from Filibe to the estates highlight that the estates prefer transferring a certain know-how and knowledge associated with the stockbreeding and wool production, it becomes different for the workforce in the agriculture and repair activities. Despite this interregional aspect in stockbreeding, when it comes to the regional level, through several direct interventions from the imperial administrative bodies, the settlement of the nomadic tribes and Crimean immigrants has implications for the labor potential

in the region. The mode of exploitation of regional labor and statuses of peasantry in the region, thereby, seem to depend on the institutional and physical closeness of each element to the estates. In other words, while the labor organization of the employees recruited from Filibe makes a more technical sense due to the primacy of wool production in the landed estates, the settlement of nomads and Crimean immigrants witnesses the direct intervention of the imperial administration and its concerns for the order in region in general, along with making more labor available for the estates in case of need.

Together with the relations of labor, also the environmental conditions in the plain of Mihaliç clearly showed that the establishment of the imperial landed estates coincides with the spending considerable amount money and labor to reconstruct the region. However, this reconstruction does not include each and every corner of the plain as a whole, rather it targets the individual venues of production owned by the state and allocated to the use of landed estates. Therefore, the question of "enclosure" becomes more nuanced than the logic of strict isolation and more related to the institutionalization of radically different order within and around the "enclosed" area.

For example, Charles MacFarlane names the imperial landed estates as "enclosures" only to highlight that the estates are the enclosed areas whose borders were drawn by stone walls. In other words, MacFarlane's observation has nothing to do with "enclosure" in its historical and theoretical senses. However, it is hard to be sure whether the imperial landed estates have been always *enclosed* even before the merino sheep and wool production. Therefore, I need to clarify two things. First, since the land in question has been categorized as "*havass-ı hümâyûn*," I am inclined to think that the imperial landed estates may have been always physically enclosed areas and subject to a different management *independent of* merino sheep. In this

scenario, I do not want to banalize the presence of physical borders and thereby I raise the *possibility* that the land and borders in question may be a sign of state-led "enclosures" dating back to the sixteenth century and being accompanied by the dispossession and displacement of its former inhabitants.

Second, I do not want to consider the massive reconstruction efforts to improve the physical conditions in the plain, or more particularly in part of the plain where the estates are founded, simply as infrastructural investments. Given the priority of wool production which is best shown by the forcibly recruited employees from Filibe and the position of chief-shepherd in the imperial landed estates, the status, management, and breeding of ever-increasing merino sheep by itself may be seen as *early signs* of "enclosure" in its historical meaning with some nuances. In other words, even if it is admitted that the imperial landed estates have been always *physically enclosed* venues, the central state through the mediation of the imperial landed estates may be *re-enclosing* the sites of agrarian production and more importantly of merino breeding by incrementally disassociating and separating these sites from a direct access from the rest of the region and by appointing clearer definitions to the use of land. But more remarkably, although I do not argue that the establishment of the imperial landed estates immediately creates a landless peasantry or changes the statuses of communal property, the state's interventions to the region –again through the mediation of the estates– give me another reason to consider the establishment as early signs of "enclosure." It is to say, if a common understanding of "enclosure" rests strictly on the dispossession and displacement of the locals who have been separated from their means of subsistence, a similar -yet not the same– process becomes observable at a regional scale in the case of imperial landed estates. With a certain caution, I am tended to consider the establishment of the imperial

landed estates as a form of "enclosure" (or "re-enclosure") mostly because the mobilization of regional and interregional labor for the estates' operations becomes an important issue and indeed a necessity accompanied by the state interventions. I think that the sedantarization attempts and the recruitment practices have a potential of changing both the means and the modes of subsistence for the nomads and employees recruited from Filibe *at varying degrees*. Also, although I am suspicious towards augmenting the settlement of Crimean immigrants to my argument here – since the state neither displaces nor dispossesses them–, it can be seen as an increase in the state capacity in the region keeping the previous points in mind. In short, I consider the whole estate phenomenon as a form of *(re-)enclosure* coupled with an ongoing *regional transformation* initiated in varying degrees by a *clearer redefinition* of resources of which the state takes an advantage.

CHAPTER 3

FROM ENVIRONMENT OF PRODUCTION TO PRODUCTION OF ENVIRONMENT: LAND, LABOR, AND SHEEP IN THE PLAIN OF MİHALİÇ

In the previous chapter, it has already been mentioned that the imperial landed estates started to operate in the lands directly reserved for the use of high-rank state officials. And, this establishment displayed a redefinition and reallocation of the land as a productive and economic category rather than a fiscal one, which is well manifested by the termination of then ongoing tax-farming and more direct involvement of the central state. In the early days of the imperial landed estates, we also saw that the physical conditions in the plain of Mihaliç were not favorable enough to immediately initiate a production process and these conditions required the central state to invest considerable amount of time and money for reconstruction and improvement. More importantly, the termination of tax-farming, on the one hand, and the resources devoted to the improvement of physical conditions in the plain, on the other, what we see is a parallelism between an urge to know more about and efficiently control the physical environment after initiating a production process. Put differently, the establishment and management of the imperial landed estates necessitate the imperial state to understand and deal with the physical conditions, also with human geography, seemingly irrelevant until then due to the disinterest in production well represented by the previous tax-farming relations.

Since their establishment, the imperial landed estates of Mihaliç has a transformative aspect due to all of the reasons mentioned above. To get a good grasp of such transformation, together with the accounting and expense books, I mostly

benefit from the certificate and summary books (*ilmühaber ve hülasa defterleri*) of the imperial landed estates of Mihaliç throughout this chapter. These books are of great relevance because they cover most of the tensions shaped by the central administration's insistent agenda of wool production and obstacles laid by the human and extra-human dynamics. In terms of content, these are the primary sources consisting of the correspondences between the responsible estate managers and authorized central bodies. Regarding the format, it is safe to say that the local information flows over to the center through the reports prepared at the local level, and the center has a final say over almost every issue.

Moreover, what I propose to do throughout this chapter is to employ a three-layered analysis to understand the characteristics of production process in the imperial landed estates. First, I will focus on the plain as a geographical unit –as an environment of production- whose physical conditions affected by the long-term climatic events. Second, I will analyze each individual landed estate in the plain to see the spatial division of labor and labor organization associated with it. Third, I will mention the particular challenges laid down by the stockbreeding and environment and what strategies the central authorities developed and what choices they made, and how these choices can be seen conducive to further discuss the production of environment.

This chapter suggests prioritizing production process as an environment-making over the relations of appropriation among which the legal tools and processes are undeniably important. Yet the relations of appropriation are incomplete because of being an inseparable phase of production process. In doing so, I benefit from the ongoing discussions among scholars from geology to humanities gathered around the term of Anthropocene. While there is no single definition of the Anthropocene that

the scholars came to an agreement, for the ones who coined the term, Paul J. Crutzen and Eugene F. Stoermer, it refers to "the current epoch of geological and historical time …which humans have become the single most potent force in shaping terrestrial and marine ecology, global ecology, and the atmosphere."[76] In parallel to this broad definition, some participants of the Anthropocene debate raise several concerns around the issues like over- or under-emphasis on the human agency, problems in proper periodization of the beginning of this human-dominated epoch, and ambiguities regarding the positioning of capitalism within the framework provided by it. One of the most powerful and convincing alternatives to the Anthropocene comes from Jason W. Moore who suggests employing "Capitalocene" not as a simple nomenclatural trick, but as a necessary strategy to go beyond the human-nature binary inherent in the Anthropocene. According to Moore, the Anthropocene does not – and cannot – "challenge naturalized inequalities, alienation, and violence inscribed in modernity's strategic relations of power and production." Moreover, by its immanent incapability, the Anthropocene reduces "the mosaic of human activity in the web of life to an abstract, homogenous humanity". By denying these abstract and binary understandings of humanity and nature, Moore comes with an alternative of seeing capitalism as *world-ecology*, not just as world-economy. In this world-ecology, there are three related and relational processes clung to each other. These are (i) *proletarianization* as a process triggered by primitive accumulation and not being a "principally *economic*" in logic; (ii) *praxis* of modern private property as a strategy aimed at separating "peasantry from nonmarket access to land: arable and grazing land, forests, wetlands, and all the rest"; and (iii) "symbolic-knowledge regime" basing itself on *alienation* as an ongoing process of "turning human activity

[76] Mikhail, "Enlightenment Anthropocene," 212.

into labor-power, and land into property".[77] In other words, the adherents of Capitalocene, very simply, argues that, there is no such thing like abstract humanity which dominates and degrades the nature only due to its species-kind, but rather historical organizations of production encapsulating humans and nature as inseparable from each other.

The case of imperial landed estates of Mihaliç, at this point, can provide a good example to engage both with state-society and human-nature binaries at a micro scale for several reasons. First of all, beyond being a small chapter in the long history of state-backed economic institutions in the Ottoman Empire, the running of the imperial landed estates cannot be seen independent of the environmental and climatic conditions within which crops are produced and animals are grazed. Second, as any other human activity, the whole production process taking place in the estates needs human and extra-human labor which cannot be thought independent of their *organization* in a certain manner and for a certain direction. Third and similarly, changes in the use of land of different sorts (pastures, fields, meadows etc.) cannot be perceived only as supplementary to the understanding the institutional or legal (re-)definitions of the land as an abstracted category, but as a physical space used and shaped by human activity. In other words, the imperial landed estates of Mihaliç, because of being an agrarian activity, should be seen as an ecological process –not strictly an institutional and economic one- whose character, scope, and scale is determined by many complicated factors.

[77] Moore, "The Rise of Cheap Nature," 82-86.

3.1 The plain of Mihaliç as a separate unit of analysis

> "'Ah' said Omer, 'did you ever cross the plain of Mouhalich? This is the place for water. There you ride with water up to your horse's nose, except now and then when you come to a broad deep river, running like mad, and where, if your horse cannot swim with you, you must drown.'"[78]

> "'Water' said Ali, who made this journey in summer time, 'who ever heard of water in the plain of Mouhalich? What bosh are you talking? I have been there, and would have given my turban for a drop of water!'"[79]

Charles MacFarlane's short conversation with these two Ottomans, Ömer and Ali, right before he decides to head in to the plain of Mihaliç is revealing because it gives a picture of the plain shaped by a temperature contrast: drought in the summer and flood in the autumn. Keeping the factor of exaggeration in mind, what makes this contrast mentioned by two inhabitants even more interesting is the possibility of the plain being known and accepted as it had been, for a long time. The plain seems more like a challenging venture for its humans and animals rather than a flourishing site of agrarian production. Without attributing absolute idleness, the question becomes what factors might have affected the bad fame of the plain and the fate of its humans and extra-humans.

Separated from the southern shores of the Sea of Marmara by Karadağ Mountain lying in its north and partially surrounded by the Uludağ (Keşiş Dağı or Olympe de Bithynie) in its eastern side, what gives the plain of Mihaliç its unique characteristics is a river network loosely connected to the Lake of Ulubatlı (Apolyond/Apollania) and the Lake of Manyas located on the both sides. Originating from the Şaphane Mountains in the south, the Simav River, or Susurluk River, passes

[78] MacFarlane, *Turkey and Its Destiny*, 416.

[79] MacFarlane, *Turkey and Its Destiny*, 416-417.

through the plain by leaving its distributaries and reaches the Sea of Marmara through Çapraz River. While not too far away the Aegean shores meeting with the Dardanelles in the west, the alluvial plain of Mihaliç can be considered as a small sub-region in the climatic geography of the Eastern Mediterranean.

Along with its physical geography shaped by mountains, rivers, and lakes, the ecological conditions in the plain of Mihaliç may not be immune to the larger climatic changes in the Eastern Mediterranean basin. As Faruk Tabak argues in his influential book, *The Waning of the Mediterranean*, the Little Ice Age marks "the decisive ecological shift" in the Mediterranean that lasted almost three centuries starting from the mid-sixteenth century to the late nineteenth-century. Regarding the consequences of the Little Ice Age in general, Tabak mentions that the Mediterranean witnessed "wetter conditions" characterized by "increased precipitation as torrential rain and … as increased snowfall on higher altitudes".[80] Since increased precipitation may have a considerable share in the happening of frequent inundations in the lower altitudes, the wetter climate in the Mediterranean, characterized by increased fluvial activity, had affected the cultivation and settlement of rural units. On the one hand, due to the fact that unfavorable conditions in the plains correlated to the threat of epidemics or "pestiferous" conditions and increased fluvial activity, the rural units had at least a reason for moving to higher altitudes and such preference coincided with a shift to production of tree crops. On the other hand, given suitability and exploitability both of the plains and mountain ranges for animal husbandry, this ecological shift did not exclude the use of plains as winter pastures

[80] Tabak, *The Waning of the Mediterranean*, 17.

and thereby it offered a non-conflictual environment between cultivation and husbandry to some extent and until some point in the past.[81]

While this shift had been happening in a long span of three centuries and the climatic conditions gradually recovered and became more favorable in the nineteenth century, it left its legacy in the lowlands by "the expansion of the swamps". According to Charles MacFarlane's visit to the city of Bursa in the late 1840s, the peasants living around the Keşişdağı Mountain, Gemlik, and the Lake of İznik (Nicaea) complain about how the swamps and poor weather severely affect their well-beings. The weather gets even worse when the central authorities ban the cultivation of rice by peasantry and the incidents of malaria increase. While the peasants' quest from the central and local administrations to take necessary precautions for draining swamps does not reach an end, physical conditions together with a set of state interventions get more unfavorable for its inhabitants.[82]

So far, it is quite clear that the province of Hüdavendigâr can be counted among the zones being exposed to the climatic shift in the Eastern Mediterranean marked by the Little Ice Age which started to gradually fade out in the 1870s. However, while the climatic and ecological conditions started to be more favorable in the nineteenth century, the long-trend of increased fluvial activity led both the swampy areas to expand in the lower lands, and the possibility of pestiferous conditions to increase. For the reutilization of these lands for productive purposes, one of the challenges was to improve physical conditions in such areas.

Within the context of imperial landed estates of Mihaliç, however, what I argue is the plain of Mihaliç had been considerably different in terms of its environmental setting compared to the rest of the province, but more specific the city

[81] Tabak, *The Waning of the Mediterranean*, 28.

[82] MacFarlane, *Turkey and Its Destiny*, 154.

and vicinage of Bursa for several reasons. First of all, it may be expected that the plain would have been in a close connection with the human and economic geography of the city of Bursa, since it lies right in the western side of the city. However, apart from Charles MacFarlane's visit in the late 1840s, the earlier travel accounts of Ottoman Bursa do not even mention the presence of the plain of Mihaliç.[83] Second, one of the reasons for the historical popularity of Bursa, in addition to being a commercial hub and its symbolic importance to the dynasty, had been the silk production. While almost all travelers mention the extensiveness of mulberry trees and silk cocoons in Bursa and its close vicinage, the silk, or any other entries implying its existence and production, is very rarely mentioned in the accounting books of the imperial landed estates.[84] Third, given presence of two lakes on the both sides and a rich network of rivers crossing the plain, it is highly likely that the plain had been more open to the effects of fluvial activities brought by the Little Ice Age[85], than other parts of Bursa. Fourth, in a correlated manner, the emergence and expansion of swampy areas and also the rise of malaria may have affected the plain in terms of temperature, low population density, patterns of settlement and agrarian production. Fifth, the plain of Mihaliç had been also separated by the river navigation mostly done through the Çapraz River, which

[83] Lowry, *Ottoman Bursa in Travel Accounts*, 39-70.

[84] BO**,** *HH.d 617,* 58. Only two entries are mentioned in August 1849-50 (1265). First one in Ottoman Turkish is "Gönü Çiftliğinde tutulan böceklerin yaprağı vefa etmediğinden mahal-i ahirden yaprak", other is "Mezbur böcekler için alınan araba". They mean that there were some silk worms kept in Gönü estate, and probably they could not make cocoons and mulberry leaves are purchased.

[85] I should underline three things at this point. First, I benefit from the Little Ice Age throughout this chapter for analytical, not descriptive, purposes. I do not adhere to an understanding that the long and global climatic cycles have an ultimate say over the physical and human geographies. Second, along with the increased fluvial activity during the Little Ice Age, the famous El Niño explosions of the early nineteenth century –as a volcanic event not being directly determined by climatic cycles– *may have increased* the fluvial activities in the Western Anatolia. However, in the lack of data documenting the water levels, it would be superfluous to include it in my argument. Third, I do not attiribute full passivity to human agency in the face of environmental challenges. Rather, I try to understand human agency *within* the environment and in a class-sensitive manner.

lessened to the cost of transportation by directly connecting the plain to the Sea of Marmara without a need to go to Bursa. In a supportive manner, for instance, the imperial landed estates of Mihaliç frequently use the river navigation through the port of Mihaliç to transport the wool, animals, and humans either to Istanbul or İzmit, but in both cases by crossing the Sea of Marmara.[86][87]

In the light of long-term climatic changes, which at least have a considerable say on the physical and environmental conditions in the Eastern Mediterranean in the nineteenth century, the imperial landed estates of Mihaliç should be positioned in a larger ecological setting. It is one way of not overlooking the characteristics of physical and human geographies at a regional scale, which is undeniably important to get a good grasp of economic activities and social relations. Also, as mentioned earlier, the state's urge to know and control the physical environment has been in parallel with initiating a production process strictly dependent on land and being specific to the geography of the plain of Mihaliç. This picture becomes even more interesting and complicated due to the fact that there is a number of individual landed estates that constitute the imperial landed estates of Mihaliç (Figure 4). In other words, while these estates are located in the plain of Mihaliç and they cannot be exempted from the long-term changes shaping the physical geography of the plain, it may be also wrong to assume homogeneity in terms of their crop variety and labor organization. Therefore, in what follows I focus particularly on the land and production data with the labor organization and land regimes to see a more detailed picture.

[86] BOA, *HH.d 617* 16, 56. "İzmide giden yapağının Mihaliç iskelesine kadar ücret-i nakliyesi"

[87] For example, Edhem Eldem also counts the port of Mihaliç among the ones mattered for French-Ottoman relations in the Eastern Mediterranean. Eldem, "Strangers in their own seas? The Ottomans in the Eastern Mediterranean Basin," 35.



Figure 4 Locations of Individual Landed Estates in the Plain of Mihaliç[88]

3.2 Spatial Division of labor in the complex of landed estates

3.2.1 Arable and pasture lands

Being said before, in the early days of the foundation of imperial landed estates of Mihaliç, in 1845-6 (1262), Nesib Paşa went to the region to authorize the transfer of his jointly owned *waqf* estate of Kayseriye, located in the district of Kirmasti, to the administration of imperial estates. More interestingly, Paşa's visit is not only about the transfer of his property, but the investigation and inspection of individual landed

[88] Map generated through using Google Maps and Google Earth through in kml format.

estates in the complex of imperial estates.[89] In the light of previous chapter, in which it is shown that the individual estates are categorically different from each other (such as being partly villages or partly estates, full estates, or leased *waqf* estates) the available data (Table 4) allows us to reconsider the spatial division of labor among the estate complex.

Table 4. Area and Distribution of Plots, Fields, and Pastures in *dönüm,* 1845-46

Estate	# of Plots	Arable Land	Pastures	Total Area	% of Arable	% of Pastures	Per Plot Arable Land[90]
Çörekli	22	3626	8374	12,000	30.22	69.78	164.8
Gerdeme Estates	24	6685	4500	11,185	59.77	40.23	278.5
Gönü	9	822	4000	4822	17.05	82.95	91.3
Melde	26	2523	6000	8523	29.60	70.40	97
Kayseri	10	1772	4528	6300	28.13	71.87	17.,2
Akçasığırlık	3	700	4500	5200	13.46	86.54	23.,3
Canbazlı	38	1203	0	1203	100.00	0.00	31.6
Kepsut	11	842	0	842	100.00	0.00	76.5
Orta	14	3489	6500	9989	34,93	65.07	249.2
Kabaağaç	6	2050	4000	6050	33,88	66.12	341.6
Total	163	23,712	42,400	66,110[91]	35.87	64.13	146.3

Source: BOA. *HH.d 616*, 84, 85, 86, 87.

[89] BOA. *HH.d 616*, 87. 3 October 1846 (12 Şevval 1262). "Mihaliç ve havalisinde kain çiftlikat-ı şahanenin havi olduğu bi'l-cümle arazisi mukaddema Dâr-ı Şûra-yı Askeri tarafından memur buyrulan mirliva saadetlü Nesib Paşa tarafından bi'l-muayene sebt-i defter olunmuş ise de …"

[90] In this chapter I benefit from the category of "per plot arable land" in several ways to diversify indicators helpful for understanding the general landscape. First, as shown in the Figure 4, the fact that individual landed estates are not adjoining each other nuances our understanding of a state enterprise. The land in question is constituted by a number of individual estates different from each other in size and plot terms, therefore it is wrong to assume or expect any homogeneity. Second, in case of such homogeneity or equal partition of total arables according to the number of total plots, the per plot arable land would be 146.3 *dönüm* for each plot in each individual landed estate. However, what we see is the opposite; this indicator fluctuates for the listed estates above. Third, and less explanatory, it is hard to draw conclusions on the correlation between (i) the partition through plots and (ii) area of arables or pastures without knowing the relations of production in each landed estate. In other words, all these points necessitate careful examination of the labor organizations in the individual landed estates within the complex of imperial landed estates of Mihaliç.

[91] While the total area of the imperial landed estates of Mihaliç is around 66.000 *dönüm* in 1845-6, it would reach to 70.000-80.000 *dönüm* in 1880. See BOA. Y.PRK 4/18. 28 November 1880 (16 Teşrin-i Sani 1296) "Mihaliç kazasında vaki' malum'ül-kıtaat çiftlikat-ı hümayun-ı şahaneleri yetmiş seksen bin dönüm kuvve-yi inbatiyesi derece-yi matlubd arazi şamil olduğu halde …"

The overall distribution of arable and pasture lands may support the primacy of stockbreeding among other economic activities in the estates. According to the table above, almost two-third of total area owned by the imperial landed estates of Mihaliç are recorded as pastures (*mera*), and only one-third is arable land. However, in addition to the comparison of individual with respect to their sizes (Table 7), the production data (Table 5, Table 6) may allow us to ask further questions regarding the spatial division of labor within the imperial landed estates.[92]

Table 5. Major Producers of Essential Crops Between 1846 and 1850

Wheat	Barley	Oat	Tare
Orta	Orta	Orta	Orta
Gerdeme	Gerdeme	Gerdeme	Gerdeme
Çörekli	Çörekli	Çörekli	Çörekli
Gönü	Gönü	Gönü	Gönü

Source: See Table 3 for the production data.

Table 6. Major Producers of Labor-Intensive/Commercially Valuable Crops Between 1846 and 1850

Tobacco	Maize	Sesame	Onion	Garlic
Orta	Akçesığırlık	Akçasığırlık	Almost all	Orta
Gerdeme	Canbazlı	Canbazlı	except	Gerdeme
Çörekli			Kayseriye and	Gönü
Melde			Akçasığırlık	Melde

Source: See Table 3 for the production data.

[92] According to *Salname-i Hüdavendigâr* (Yearbook of the Province of Hüdavendigâr) from 1880s, a rather late snapshot of plain can be found in terms of area of arable and pasture lands. For example, in the 1880s (i.e. roughly thirty or forty years later than the period of this study), it is noted that there were 596,880 *dönüm*s of arable lands and extra 132,850 *dönüm*s pasture, which add up nearly to 730,000 *dönüm*s for the plain as a whole. If it is *assumed* to be the sizes of arable and pasture lands did not change in three or four decades, there may be several interpretations regarding the physical presence of imperial landed estates of Mihaliç. First, it means that the area owned by imperial landed estates constitutes nearly 9.05% of the plain. Second, the arable land of the estates constitutes 3.97% of the arable land in the plain. Third, and more interestingly, pastures of the imperial estates, constitutes 31.91% of the pastures in the plain. Given the earlier improvement and construction activities in the plain, there may be one more interpretation. If the sizes of arable land increased in three decades following the period in question in this study, it may imply that the imperial landed estates of Mihaliç in arable terms constituted larger percentages compared to ones presented here.

Table 7. Largest Individual Estates in 1845-46

According to Arable	Area in *dönüm*	According to Pasture	Area in *dönüm*
Gerdeme	6685	Çörekli	8374
Çörekli	3626	Orta	6500
Orta	3489	Melde	6000
Melde	2523	Gerdeme	4500

Source: See Table 4 for the land data.

Within the complex of imperial landed estates, Orta, Gerdeme, Çörekli, Melde, and Gönü estates seem to be the most noticeable and functional ones due to the following reasons. First of all, both for feeding animals and reproduction of human labor, the dominant part of production of essential crops like wheat, barley, oat, and tare takes places in the four of these estates. Second, in the case of commercially valuable crops, except maize and sesame, it is this group of estates participating again the production of tobacco, onion, and garlic in great quantities. Third, together with their capacity to produce both essential and commercially valuable crops, these five estates are the largest ones in terms of their areas. Moreover, the estates of Kebir (big) and Sagir (small) Gerdeme, which are often mentioned as a single estate of Gerdeme, are noticeable since they have the largest arable land and the second highest capacity to produce wheat, barley, oat, and tare. It may be consistent with another document mentioning the construction of a mill in the estate of Gerdeme as an intersection point of production of cereals, flour, and bread.[93]

The Gönü and Melde estates are also important since they are partly villages and partly estates, and still among the most functional five estates. Again, from the perspective of production, for example, the Gönü estate has a remarkable share in the

[93] BOA, İ.DH 106/8336, 24 April 1847 (8 Cemaziyelevvel 1262).

cereal production despite it has only 822 *dönüm* of arable land shared by nine plots, but 4000 *dönüm* pastures. In the case of Melde, moreover, in addition to being one of the largest four estates, it becomes more noticeable in the production of tobacco and garlic, unlike the Gönü estate's share in the cereal production. The Melde also has 6000 *dönüm* pastures, which always reminds also the need of estates for enough space of stockbreeding.

The figures regarding the *waqf* estates of Akçasığırlık and Canbazlı are quite interesting. While these two estates are the major producers of maize and sesame, these crops are not produced in great quantities. When looked at their pastures, Canbazlı seems to have no pastures but only 1203 *dönüm* of arable lands with 38 plots (around 32 *dönüm* per plot). While this low rate of per plot arable land may imply intensification of commercial production and tendency to parcel out land in the *waqf* estates, the case of Akçasığırlık is quite the opposite. Having 700 *dönüm* of arable in three plots, Akçasığırlık has a considerably high potential for being leased for its pastures.

In the accounting books of the estates, roughly between 1846-50, the monthly expenses and annual production of crops are recorded for only eight estates, but in the table above there are ten of them. In other words, the production and expenses of the estates of Kepsut and Kabaağaç are not directly traceable in these books. Interestingly enough, the management of Kepsut estate sheds light on some ambiguities observed in the accounting books. For example, in the accounting records, it is noted that the chief-directors (*müdir*) of the estates has rice (*çeltik/pirinç*) in their inventory (*zimmet*).[94] But in the list of annual produces of crops, rice is never

[94] BOA, *HH.d 617*, 16, 17. "Müdir-i mumaileyhe zimmet kayd olunarak berminval-i muharrer usulüne tatbikan muhasebe zımmında tesviye-yi iktizasına bakılması müteallik ve şeref-sudur buyrulan emr-ü-ferman…" and "Çiftlikat-ı şahane müdiri Halil Efendi marifetiyle iki yüz altmış iki

mentioned. The reason for such absence is that the central state decides to rent out the paddies in the estate of Kepsut in 1846 through auction and approval of district council (*kaza meclisi*) to its locals who are eager to benefit from the land and who are expected to provide strong guarantors.[95] Since there is no monetary rent recorded in the accounting books, it is fair to assume that the estates received the rent in kind and the rice is kept in the inventory of chief-directors. The case of Kabaağaç is more complicated because there is not much information about it. Given its distribution of arable and pasture lands is very close to the average of ten estates, it is likely to serve as a site of both grain production and stockbreeding. However, the lack of its production data in the accounting books may suggest that it is used mostly as pasture.[96]

Once more, there is a remarkable similarity between the estates of Canbazlı and Kepsut. Both resembles considerably lower rates of per plot arable land and both hosts the production of commercially valuable goods like sesame, maize, onion, tobacco in Canbazlı and rice in Kepsut. For example, while the per plot arable land is

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senesi [1262] mahsulünden füruht olunarak zimmet-i kayd olunan pirinç bahasının kusuru". The rice is kept as a liability (*zimmet*) in the inventory of chief-director Halil Efendi.

[95] BOA, *HH.d 255*. 81, 15 May 1846 (19 Cemaziyelevvel 1262). "Kepsut kazası dahilinde çiftlikat-ı şahane arazisinden çeltik arazisinin işbu [12]62 senesine mahsuben icarına kaza-yı mezbur ahalisinden bazı kesanın talib oldukları bu tarafda tahkik ve istihbar olunmuş ve bu makule arazinin usul ve nizam-ı seniyeye tevfiken icar olunması iktiza-yı maslahattan bulunmuş olduğundan binaen … zikr olunan çeltik arazisinin kiraya verileceği iktiza edenlere ilan olunarak meclisçe bi'l-müzayede ne mikdar bedel-i icar ile kimlerin uhdelerine kalır ise kavi kefil ve temhire ve tekasit-i **…** rabt olunarak mikdar bedeli ve müstecir olacakların isim ve şöhretlerini mübeyyin ve bedel-i mezburun taksitlerini ve küfelasının meclisçe kabul kılındığını mutezammın iktiza eden mazbatasının sürat-i irsaline mübarederet …"

[96] BOA, *HH.d 617*, 53. There is another missing estate called Karayanni (or Kara Yanni). It is purchased in 23 January 1850 directly by the State Treasury (Maliye Hazinesi). "Mihaliç ve havalisinde çiftlikat-ı şahaneye ilave olunmak üzere mübayaa olunan Karayanni çiftliği bahası olup emr-ü-irade-yi seniye-yi hazret-i mülükane mucibince maliye nazırı devletlü Şakir Paşa hazretleri tarafından ita olunan… 30,000 *guruş*". According to *temettuat* (land and income) registers, Karayanni has seven Turkish households who produce mostly cereals. They also six buffalos, seven cows, and a number of offspring. Fields in cultivation (*tarla*) reach to 190,5 *dönüm*, while uncultivated to 275 *dönüm*. BOA, *ML.VRD.TMT* nr. 8911. Given the higher share of uncultivated area and production of cereals, such purchase may reflect that the expansion of the imperial estates happens toward assuring both animal feed and space.

31,6 *dönüm* in Canbazlı, and 76,5 *dönüm* in Kepsut, neither of them has pastures. Since there is no further evidence that may help to raise more interpretations about the performance of these estates, available sources imply to some extent that there should be a sort of correlation among commercialization, parceling out, and the lack of pastures, together with the types of estates, either *waqf* or private or *miri* in origin.

3.2.2 Labor organization in the individual estates

One of the most unique aspects of the imperial landed estates of Mihaliç is related to the fact that they are not adjoining each other in terms of physical borders. In other words, these are the estates scattered around the plain of Mihaliç, especially in the area whose borders drawn by the Susurluk River in the west and the Lake of Apolyond in the east. Despite the presence of certain distance among them, what the accounting books suggest is that almost each individual estate has its own officials appointed and paid by the state. Along with the top managerial officials who are responsible for the management of the estates as a whole *entity* as mentioned in the previous chapter, the managerial figures of the individual estates constitute an intermediary body of people having direct eyes over the in-estate processes.

According to the distribution of arable and pasture lands and to the variety and quantity of crops, it has been already said that Orta, Gerdeme, Çörekli, Melde, and Gönü estates are of most importance among all. Since Orta, Gerdeme, Çörekli estates are *full* estates for being directly and completely controlled by the estate management unlike Melde and Gönü estates being partly estates party villages, it is fair to assume that these three estates are the major ones among all. Furthermore, in

the light of Table 8, in a supportive manner, there are managerial figures appointed to them at the intermediary level.

Table 8. Appointed Managers and Stewards of Individual Estates - *Çoban ma'a Kahya*

1848-49	*Memur* (Official) of Çörekli	*Çorbacı* of Çörekli	*Memur* (Officials) of Canbaz and Akçasığırlık	*Kahya* (Stewards) of Orta, Gerdeme and Çörekli	*Baş Kahya* (Chief Stewards) of Orta and Gerdeme	*Çorbacı* of Orta
	# of people	# of people	# of people	# of people	# of people	# of people
March	1	2	1 or 2	-	2	-
April	1	2	1 or 2	-	2	-
May	1	2	1 or 2	-	2	-
June	1	2	1 or 2	-	2	-
July	1	2	1 or 2	-	2	-
August	1	2	1 or 2	-	2	-
September	1	2	1 or 2	-	2	-
October	1	2	1 or 2	-	2	-
November	1	1	2 or 4	2	3	4
December	1	1	2 or 4	2	3	4
January	1	1	2 or 4	2	3	4
February	1	1	1 or 2	2	3	4
1849-50	*Memur* (Official) of Çörekli	*Çorbacı* of Çörekli	*Memur* (Officials) of Canbaz and Akçasığırlık	*Kahya* (Stewards) of Orta, Gerdeme and Çörekli	*Baş Kahya* (Chief Steward) of Orta and Gerdeme	*Çorbacı* of Orta
	# of people	# of people	# of people	# of people	# of people	# of people
March	1	1	1 or 2	2	3	4
April	1	1	1 or 2	2	1	4
May	1	1	1 or 2	2	4	4
June	1	1	1 or 2	2	4	4
July	1	1	1 or 2	2	4	4
August	1	1	1 or 2	2	4	4
September	1	1	1 or 2	2	4	4
October	1	0	1 or 2	2	4	4
November	1	0	-	2	4	2
December	1	0	-	3	4	2
January	1	1	-	3	3	2
February	1	1	1 or 2	3	3	0

Source: BOA, *HH.d 617*, 3-19, 13-17, 53-65. See Table B2 for the wages.

What the Orta, Gerdeme, Çörekli estates have in common is their stewards and chief-stewards. Already being said that the imperial landed estates encapsulate

multiple production processes in which the stockbreeding has its own personnel. I argue that these stewards and chief-stewards are responsible for the discipline and coordination of direct laborers in agriculture. It is because the estates (i) seasonally appoint some officials for taking care of lambs and the flocks of sheep when it is time to go to pastures; and (ii) the recruited Bulgarians have their own stewards and chief-stewards.[97] It means that due to the ecological rhythm of stockbreeding tapped out by the extra-human environment, there has always been a permanent and reserve bodies of care-taking and mobile officials who were appointed. In a way, the presence of these stewards and chief-stewards in the individual estates may imply that they take more responsibility in the coordination of agrarian production and labor force used for it.

Given the ambiguous category of *çorbacı*, within the scope of imperial landed estates, especially in Orta and Çörekli, it is hard to be sure what exactly they do, given the spatial division of labor. In Charles MacFarlane's account, the *çorbacı*s in the region in general have bad connotations and they are mentioned together with other tax-collectors for being a nightmare of small peasantry. Also, regarding their ethno-religious origin, MacFarlane's observations suggest that they are mostly the Ottoman Greeks of the region.[98] Moreover, in the accounting books, especially in the nominal section, the *çorbacı*s with their families receive payments in-kind (*tayinat*)[99] which allows me to consider the *çorbacı*s as a part of permanent group of people settled in the imperial landed estates. Within the body of intermediary managers, unlike stewards and chief-stewards who seem to be directly responsible for coordination of agrarian production and unlike the officials who seem to delegate the

[97] BOA, *HH.d 617*, 3-19, 13-17, 53-65.

[98] MacFarlane, *Turkey and Its Destiny*, 387, 424.

[99] BOA, *HH.d 617*, 3-19, 13-17, 53-65.

top-estate management at the level of individual estates, the *çorbacı*s may be the ones who are capable of establishing strong ties with the human geography in the plain of Mihaliç. In the accounting books, in addition to the nexus of permanent managerial figures and recruited laborers who are traceable in the entries, the estates also need to employ the inhabitants in the region either for seasonal (plucking, reaping, weeding) and occasional (mostly for small repairs) works. And, the *çorbacı*s, given the assumed immobility of top-managers and officials of individual estates, may work as the intermediaries who assure the additional labor supply to fulfill the needs of imperial landed estates both in seasonal works in agriculture and occasional repair activities.[100]

Last, the case of two *waqf* estates of Akçasığırlık and Canbazlı are again different from the rest of the estates. They do not have neither the *çorbacı*s nor the stewards, but only the officials being ambiguous in exact number. Despite differences between Akçasığırlık and Canbazlı estates in terms of their rates of per plot arable land, they are the ones most noticeable in the production of maize and sesame. What is even more interesting is the fact that the agrarian production in these *waqf* estates are mostly done through sharecropping within the period of this study.[101] At this point, the only presence of managers and the absence of stewards and *çorbacı*s may imply that the estates do not directly step in the production of commercially valuable crops as in the case of these *waqf* estates, rather the management prefers taking rents as cash or in kind. However, while the

[100] Charles MacFarlane in his travel account mentions the level of daily and monthly wages received by laborers in the Bursa plain. More interestingly, apart from the monetary payments, MacFarlane notes that landed estates (*ciftlik*s) gave "morning soup and evening meal" to the laborers. Since *çorbacı* literally means "soup-maker", this tiny detail gives another reason for thinking the *çorbacı* more in relation with the human geography of the region. And, since the soup and meal is served in the landed estates (i.e. laborers should be brought to the plains), it does make a certain sense to attribute mobility to the *çorbacı*. See: MacFarlane, *Turkey and Its Destiny*, 440.

[101] BOA, *HH.d 617*, 12. "Canbazlı çiftliği ortakçısı Dimitriye verilen" and "Akçasığırlık ortakçılarına verilen … Salih kethüdaya verilen … Hüseyin Ağaya verilen".

sharecropping arrangements are constantly observed in the *waqf* estates, it is not strictly related to the category of being *waqf* in the first place. In other words, the major drive that may put the estates to have sharecropping arrangements seems to be the logistics of production in these commercially-valuable crops, which are indeed the more labor-intensive ones. Put it differently, from the perspective of the estate management, the choice of making a sharecropping contract for the production of labor-intensive crops may coincide with the labor cost associated with them in most of the cases. In order to support this pattern, the example of Kepsut estate, famous for its rice cultivation, has already displayed that the paddies are rented out in a similar manner. Regarding the tobacco production in which the Orta, Gerdeme, and Melde estates are noticeable again, there are similar sharecropping arrangements.[102] Also a similar pattern is observed in the production of broad bean (*bakla*), onion, and tobacco in the Gerdeme estates.[103]

Probably the most important thing about the sharecropping arrangements is the difficulty of coming up with a single definition. In the light of archival material, it is fair to say that these arrangements vary from each other depending on the crop type. First of all, the paddies in the Kepsut estate are leased to the tenants and they are expected to pay their rent in kind. It is a type of contract where the estate management does not have any further responsibilities in the production process, but a right to demand its (unknown) share from the total produce for being the *owner* of the land and in the name of rent. Second, the sharecroppers in the tobacco production are remarkably different than the ones in rice cultivation. In the accounting books, the sharecroppers in tobacco production regularly receive payments in-kind (*tayinat*)

[102] BOA, *HH.d 617*, 3-19, 13-17, 53-65.

[103] BOA, *HH.d 617*, 12, 72.

and they live right in the estates.[104] In this case, it seems that the estate management provides the basic needs and necessary equipment to the sharecroppers, and then calculates both the cash equivalent and weight of the produce after the harvest. The estates have a right to appropriate the tobacco produce in quantity, and most of the time they either pay the cash value or leave a part of the produce in quantity as a share of cultivators. Put differently, the sharecroppers in tobacco production either hold the produce in quantity at the end of the day or receive their cash equivalent. Third, in the production of maize, sesame, broad beans, there is another pattern likely to be seen as a combination of the former two. In the sharecropping arrangements of these crops, the estate management and share-tenants involve with the production process together. It means that in this arrangement the estate and share-tenants have their pre-negotiated shares in the cost of production as well as in the final output. In the accounting books, for example, the entries mention the cost of plucking, reaping, weeding of these crops mentioned as "the imperial estates' share in those costs".[105] This picture even gets more complicated at the annual level, apart from the sharecropping arrangements mentioned and settled throughout the year, the estates mention their rents (in kind) obtained from leasing a small amount of the fields in the different estates.[106]

One way to deal with the existence of multiple production processes and various sharecropping arrangements depending on the crops may be to remind ourselves the transition from premodern to modern statecrafts. First of all, the labor organization in total clearly shows that it is hard to treat the imperial landed estates

[104] BOA, *HH.d 617*, 3-19, 13-17, 53-65.

[105] BOA, *HH.d 617*, 56. "Orakçı ücreti [Ortakçı bulunan çiftlikler] ... Akçasığırlık, Kayseri, Melde"

[106] BOA, *HH.d 617*, 66. "Arazi-yi çiftlikattan kiraya verilen tarlaların bedel-i icarı mukabili ahz olunan zehairin mikdarıyla rayiç-i vakt üzere bahası"

of Mihaliç as a production unit destined to produce single crop or output. This is partly because there is a remarkable difference between agriculture and stockbreeding when it comes both to the composition of labor and the nature of these activities. The stockbreeding has its own personnel from overseeing managerial figures to direct laborers like recruited shepherds and wage-laborers. And, the agrarian production is divided into two major processes such as the production of essential crops directly by the efforts of the estate management and the production of commercially-valuable and labor-intensive crops through a set of sharecropping arrangements. Each of these agrarian processes also has their own intermediary figures and direct laborers untraceable in exact number. Second, given the primacy of stockbreeding for the central administration within its larger development plans, the diversity of crops displays that the agrarian production cannot be reduced to a complementary position to support stockbreeding. This is another way of saying that the establishment of the imperial landed estates in the plain of Mihaliç cannot be reduced to the wool production. Third, from the perspective of the central state, especially the scope and character of sharecropping arrangements in the commercially-valuable and labor-intensive crops may imply a reflex both to exploit the land with minimum labor costs, but also to monitor their production by partaking in the production process in varying degrees.

Fourth, and more provocatively, it should be asked to what extent the establishment of the imperial landed estates and their closer involvements with the production process bring a radical change to the regional human geography. It seems that the central administration through the mediation of the imperial landed estates intervenes the relations of production in agriculture, inspects and partakes more directly by being present at the local level. While the early modern Ottoman

statecraft was characterized by its tendency to farm out the land to the tax-farmers in a specific region, the primary concern and expectation was only to receive money from the tax-farmer, not to intervene the production process and local dynamics as much as possible. However, in the example of imperial landed estates of Mihaliç, the direct involvement of the state resembles a parallel between its urge to know more and control the resources more efficiently. Interestingly enough, the definition of efficiency, in this case, does not fit into a generalizable capitalist economic logic of profit maximization dominantly in monetary terms. In the domain of agrarian relations and production, it is a type of efficiency characterized by cost minimization manifested as a combination of minimizing monetary expenses and tendency to rest more frequently on the non-monetary economy, which thereby may have increased the state capacity in terms of the control over the regional resources. While the early-modern state farms-out its land to the tax-farmers through auctions, now what we see is that the *modern* state more directly takes place in a production process which necessitates more systematic knowledge production to be obtained through inspections, land registers, simple censuses. Coinciding with this direct involvement, the modern state rents-out a part of its land, reserved for more labor-intensive tasks, possibly to minimize the cost of production. Therefore, if it can be said that the traditional element in agriculture was to regularly receive and maximize tax-revenues through tax-farming marked by a disinterest in the production process itself, this disinterest survives, to a certain extent, by renting-out the land through various sharecropping arrangements for the sake of cost minimization. While the presence of appointed managerial bodies at multiple scales presents the estate management as *an* appendage of the central state, in various sharecropping arrangements the estate management concurrently appears and acts like a distant rentier *landowner* in

relations of rice production, almost *a capitalist landlord* in tobacco cultivation, and a rule-setting *entrepreneurial partner* in the relations of maize, sesame, and broad bean production. In other words, the establishment of the imperial landed estates as an intervention to the relations of production appears both as intensification and diversification of hitherto existing labor relations without changing the statuses and even possibly basing on overexploitation of the small peasantry and laborers.

3.3 Stockbreeding *in* nature: Learning by doing

Having said that the establishment of the imperial landed estates in the plain of Mihaliç should not be reduced into just another state-launched entrepreneurial activity destined to produce wool for imperial factories, it is also important to note that bringing thousands of sheep from the Balkans and Crimea had not been an easy task, given the physical conditions in the plain of Mihaliç. If it can be said that the realm and management of agrarian relations of production had been more familiar to the Ottoman state, it may not be true to say the same thing for stockbreeding. Since the earlier days on, the management had been always aware of the burdensome business that required employing qualified shepherds and stewards. Moreover, given the scope and content of correspondences between the estate managements and responsible central bodies, it was the stockbreeding that led both central and local authorities to be more exposed to, and more aware of, the physical conditions in the plain. And, it was this exposition and awareness that urged the estate management to come with solutions to the problems like providing enough shelter for lamb and sheep, finding remedy for diseases spread -or to be spread- among the flocks, and

assuring the availability of pastures each and every year. Thus, among all the physical challenges, the issue of assuring summer pastures is of paramount importance for the estate management given the volume of entries in the primary sources. To be more specific, there are several critical entries in the certificate and summary books which clearly unfold the scope of preparations and earlier challenges faced by the central state and the estate management.

3.3.1 Urgency versus efficiency: pastures and diseases

The first entry in the certificate and summary books is about the conditions of pastures in and around the estates. Dated 12 March 1847, this one states the lack of *enough* pastures given the increase in animal population mostly because of newborn lambs in the estates. Although the chief-shepherd Austrian Matej and the chief-director Halil Efendi report this problem to the central bodies, it is not seriously analyzed for some time and it becomes secondary due to the primacy of accurately reporting the accounting books of 1846. Once the pasture problem is considered by the central and local bodies, two possible solutions are on the table. First option is to rent extra pastures for sheep around the mountain of Keşişdağı (Uludağ) which are already rented by Turkman nomads (*Türkmen taifesi*) who have been living there. The second option is to improve the conditions of pastures in the estates. After stating these options, the final decision is expected to be made by Mösyö Agaton, the Russian translator employed in The School of Agriculture (*Ziraat Talimhanesi*), after he is ordered to visit and inspect the region. The second option of the improvement is discussed by Agaton in comparison to European examples. According to his

inspection, the pastures in Europe are formed and improved by sowing meadow seeds in the appropriate places, and it is proven to be better for sheep and also for other animals.[107] After visiting the region, Agaton suggests renting extra pastures to satisfy the urgent need of the estates, not the improvement of pastures.

These correspondences among the state authorities imply more than the strategical-thinking and decision-making for the estate management. It rather problematizes what amount of pastures can be seen "enough". According to primary sources, total number of sheep in the imperial landed estates reached 18,500 in 1848-50[108] and they seem to be divided at least into two flocks.[109] In the light of previously mentioned Table 4, two-third of total area owned by the estates is categorized as pastures and separated for stockbreeding, but still it does not meet the need of increasing sheep population. Moreover, even the discussion of sowing meadow seeds by the authorities –to get more *efficient* pastures in the long-run– implies that the

[107] BOA, *HH.d 616*, 87-88. "Mihaliç ve havalisinde kain çiftlikat-ı şahane meraları bu sene tevlid etmekde olan kuzulardan dolayı ağnam-ı mevcudeye kifayet etmeyerek icra-yı tedariği ihtarına dair çobanbaşı Matejin Höce Arakil tarafına bazı mertebe iş'aratı vuku' bulmuş ise de keyfiyet layıkıyla anlaşılamadığından ve müdir Halil Efendinin dahi buna dair bir güna inhası zuhur etmediğinden hem istiknah-ı madde olunub iktizasına bakılmak ve hem de 62 senesi müddeti tekmil olmasıyla çiftlikat-ı mezbure hasılat ve mesarifatının muhasebe-yi seneviye icmali bi't-tanzim takdim olunmak içün müdir-i mumaileyhin celbi lazım gelerek ol-vechle yazılan şukka geçen posta ile gönderilmiş ve şukka-yı mezbure yolda iken husus-ı mezburun müzakeresi zımmında müdir-i mumaileyh gelmiş olmağla … keyfiyet ledel'sual saye-yi mekarim-vaye-yi cenab-ı padişahide ağnam-ı mezbure günden gün biriktirülüb meralara sığışmamakda ve ma'lul olanlar dahi bir tarafdan icra-yı müdavat ile sıhhat bulmakda olmasına mebni lüzumu mikdar meranın vaktiyle tedariğinden **…** olacağını ifade ve Keşişdağı eteklerinde ve yukalarunda güzel koyun meraları olarak bazı Türkman-taifesini isticar etmeğin ise de ağnam-ı şahane içün isticarı münasib ve mümkün idüğünü beyan ve işa'a eylemiş olub bu hususun sür'at-i tesviyesi icab-ı maslahattan olduğu misüllü 'ilmiyat-ı ameliyat erbanın muayene ve intihabıyla icra olunması tatbikatı müstelzem olarak malum-ı samileri buyrulduğu üzere ziraat talimhanesine Rus tercümanı memur buyrulan Agatonun 'ilmen ve 'amelen ehil ve erbab olduğu cihetle bi'l-celb müdir-i mumaileyh hazır olduğu halde olunan müzakerenin fezlekesi üzere Avrupada olan meralar buralar gibi olmayub münasib mahallere bir nev'i çayır tohumu zer'iyle meralar ihdas olunduğuna ve bunlarda re'y olunan koyun ve hayvanat-ı sairenin ez-her cihet-i **...** mücerreb [denenmiş sınanmış] idüğüne binaen müdir-i mumaileyhe terfiken merkum Agatonun çiftlikat-ı mezbureye izamıyla bu vechle arazi-yi çiftlikatta meralar ihdası mı lazım gelür yoksa mevki'ce … aher mahallerden tedariği iktiza ettiği surette nerelerde bulunabilecektir ve ihdası mümkün olduğu takdirde bu sene ne suretle idare olunmak icab eder bi'l-muayene malumat-ı mahalliyesi üzerine ishal ve akdem suretleri mütalaa olunarak bu babda vuku' bulacak ifade ve iş'ara hakikat-i hale göre müsara'ta-yı iktizalarına bakılması …"

[108] BOA, *HH.d 617*, 56

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[109] BOA, *HH.d 617*, 8.

lack of pastures might be more about the quality, not just the quantity of pastures. And even the estate management provides new pastures that enable the containment of more animal, old and new pastures would not be enough in nutritional terms.

Furthermore, the choice of renting pastures around the Keşişdağı that have been already rented by nomads (*Türkmen taifesi*) may allow us to rethink the character of sedentarization policies forced by the state. Along with implications of such policies for providing the state an easier surveillance and turning nomads into settled labor source, in this specific example, the central administration –through the mediation of the estate management– competes over the use of summer pastures in the higher altitudes. The nature of such competition is an interesting and unequal one. In a way, it shows that the pastures around the mountain have been more preferable compared to the ones in the plain and they are already in someone's excludable possession to be rented to its inhabitants. Further the state has its administrative power to step in and abolish the previous contract with the nomads. Or, the nomads, who have been possibly busy with grazing their sheep in these pastures and who have been equipped with the knowledge of the environment, are now partially displaced and their rights of use are dismissed due to the *needs* of the imperial landed estates. Furthermore, the central state orders the estate management to take all necessary precautions to protect the imperial flocks against the threat of nomad contact and mixture of non-imperial animals.[110] In contrast to the state's numerous attempts for the sedentarization of nomadic tribes to the plains, as discussed in the

[110] BOA, *HH.d 255*, 101. 7 May 1846 (11 Cemaziyelevvel 1262). "Keşişdağı ve havalisinde bulunan yaylalarda rey' mevsimi havil ederek bu günlerde gönderileceği müdiri Halil Efendi bendeleri tarafından ifade ve beyan kılınmış ve ma'lum-ı sami-yi müşiraneleri buyrulduğu üzere ağnam-ı şahane-yi mezkurenin re'y olunduğu yayla ve mer'âda kimesnenin ağnamı bulunmamasında şiddet-i lüzum görünmüş olmağla ağnam-ı şahane-yi mezkurenin zikr olunan yaylalarda re'yile yörükan taifesinden kimesnenin ağnamı karıştırılmaması ..."

previous chapter, the lack of and need for pastures create a reason for nomadization of the state, in the sense that competing over the mountains against the Turkmans.[111]

In addition to the issues associated with the assuring enough summer pastures and the implications for the use of land, it is so obvious that the imperial flocks would have also affected the physical geography, along with the human one, to great extent. Faruk Tabak saw the state and large landowners as two major historical agents in the Ottoman Empire who had financial and administrative capacity to shoulder the burden of reconstruction of the plains that gradually became unfavorable for agriculture due to the climatic change brought by the Little Ice Age.[112] While Tabak's conclusion implies that the state and landowners also undertook the mission of environmental reconstruction as an outcome of economic drives, the case of imperial flocks, however, offers another perspective to seriously reconsider this point. Given the poor quality of pastures in terms of their nutritional value and constant search for new pastures in the region, doesn't the state for bringing great numbers of sheep seem more like a destructive power rather than a constructive one? Almost like any other human actor having a small flock of sheep in the plain, the estates' constant search is heavily affected by the long climatic changes ending up with low quality of pastures. It is destructive because maybe more than any actor in the region the state further exploits these pastures with almost 20,000 sheep and it may deepen –or at least contribute to– the ongoing environmental crisis. It is this specific overexploitation of pastures, through overgrazing, brought by the state's financial capacity of purchasing large amounts of sheep and its administrative

[111] The use of pastures and meadows seems to become more complicated and crucial in understanding of privitization of common lands especially in the second half of the nineteenth century. See: Terzibaşoğlu, "'A very important requirement of social life': Privitisation of Land, Criminalisation of Custom, and Land Disputes in Nineteenth-Century Anatolia," 29-36.

[112] Tabak, *The Waning of the Mediterranean*, 205.

capacity to take control of extra pastures which may not be accessible to any other actor that easily.

Another issue frequently bothered the estate management is the spread of diseases among the imperial flocks and other animals. At this stage, it is worth exploring the link between the environmental impact of the Little Ice Age and the pestiferous conditions conducive to diseases or epizootics. While it is extremely difficult to establish a direct causal connection between such a long-term phenomenon in such a narrow temporal and spatial scale, we cannot dismiss the possibility of fungal diseases proliferating due to prevailing conditions of increased precipitation. At the same time, it is currently impossible to document an increase in epizootics since this is the first time we have state documentation on animal disease due to industrial-scale animal farming. In this sense, the question should remain open.

Be that is it may, the documentation consulted testified to the concern of the state for ensuring the health of the imperial sheep. The accounting books of imperial landed estates, thereby, give a chance to discover the ingredients and material used as remedy for such diseases mostly affected the sheep. For example, natural lead mono-oxide (PbO) or litharge (*mürdesenk*) is mentioned several times.[113] It is usually mixed by olive oil to heal external wounds caused by furuncle (*çıban*). To heal intestinal worms, a material called *sülümen* is frequently purchased by the estate management.[114] Another frequent purchase was *göztaşı*[115] to heal fungus diseases mostly affected the legs of sheep. In addition to them, there are also purchases described as remedy in general *(edviye)*, silver hypodermic needle (*sim iğne*), vaccination (*aşı*), etc. These entries beyond being monetary costs display the

[113] BOA, *HH.d 617*, 5, 15, 16

[114] BOA, *HH.d 617*, 4.

[115] BOA, *HH.d 617*, 13, 14.

exposition of primarily sheep and all other animals to the diseases which have bacterial or fungal causes widespread in the pestiferous environments. And, more than just a simple exposure to external factors, the low nutritional capacity of pastures may affect the weakening of immune systems of the animals and make them more vulnerable to have furuncles. And, the materials used for healing them show a combination of natural medicine and "pharmaceuticals" accessible at that time. It was also this health aspect of stockbreeding which pushed the estate management to be in a constant search for a qualified chief-shepherd (*çobanbaşı*) to be employed. And, after a number of chief-shepherds, it was the chief-shepherd Austrian Matej who healed the external wounds that imperial flocks had in eight months by using tobacco and salt.[116]

3.3.2 Minimizing risk by increasing chances

Under these physical conditions that pushed the estate management to choose urgent expansion over efficiency of pastures and that constituted a threat to health of imperial flocks, it should be asked what makes Mihaliç so preferable over other imperial venues across the empire. A part of this question has been already discussed by the presence of Mihaliç port which may have lessened the cost of over-land transportation by river navigation reaching right into the Sea of Marmara. However, what primary sources suggest is that the Mihaliç is the major, yet not the only one, imperial hub for breeding merino sheep.

[116] BOA, *HH.d 617*, 65. "Mayıs ibtidasından teşrin-i evvel gayetine kadar altı mah zarfında çobanbaşı Matez marifetiyle mualece ve mesarif-i saire bahası ba-sened verilen ...5998 *guruş*"

In a lengthy document dated around 2 February 1846, roughly three years after the establishment of the imperial landed estates in the plain of Mihaliç, the central authorities discuss two things: (i) the techniques behind a successful breeding of merino sheep, and (ii) other imperial venues that would be utilized for the same purpose. The wool to be produced is planned to be obtained by merino sheep, not the Anatolian ones whose wool is stiff and sharp (*serd ve haşin*). In addition to the fact that great number of merino sheep is brought to the plain, one of the missions of the imperial landed estates is to provide breeding merino rams to the several destinations in the Balkans: Selanik (Salonica) and Tırhala (Thessaly). More interestingly, these are not random destinations. The merino rams are ordered to be transferred to a group of people who established a company (*kumpanya*) and whose founders are dominantly the members of local notables (*hanedan-ı memleket*). In case of the company and other (possibly notable) locals in the Balkans, whoever had worthy merino ewes, it is discussed to transfer 50 merino rams from Mihaliç for each 1000 ewes in Selanik and Tırhala. According to the manual to be sent with the rams, it is calculated that the fourth generation (i.e. after the third wave of reproduction) of newborn ewes and rams would be the pure merino breed. If everything goes well, the wool of these merino sheep is assured to be purchased at its double price for the imperial factories. For the fourth generation of merino rams, their owners are allowed to sell them after two years as long as these merino rams are castrated.[117]

[117] BOA, *HH.d 616*, 83 2 February 1846 (5 Safer 1262) "…çiftlikat-ı zat-ı şahane memalik-i mahruse-yi saltanat-ı seniyede… daimen merinoz damızlığı yetiştirilerek … rivayet olunduğunda göre Anatolu ağnamının yapağısı serd ve haşin olduğundan bu ülkenin yerlü koyunlarında husulü gayr-i mümkün olub … kılınmışdır ağnam-ı merkume mevsim-i şitada Selanik ve Tırhala taraflarında kışlamakda ve eshabının ekserisi hanedan-ı memleket olarak içlerinden beş on kişi kumpanya gibi şirket idüb bu babda gönderilecek talimhane tatbiken kendü sürülerinden merinoza çekiği ki şayana takdir dişi ağnam bulunur ise bir sürü itibar olan 1000 res koyun 50 res hesabıyla muktezi olan koçlar çiftlikat-ı şahaneeden demirbaş olarak … verilmek ve bunlardan üçüncü karın ve dördüncü nesilde hasıl olan kuzuların erkek ve dişisi merinoz olacağı cihetiyle işbu merinozların yapağısı yapağı yapağı fiyatının iki katı verilerek fabrika-yı hümayun içün alınmak ve mezkur koyunlardan üçünü karına gelince yani ... ikinci yaşında husul bulanların içlerinden fakat erkek olanlar burulub eshabı tarafından

Together with these calculations, the documents always stress the importance of qualified shepherds for proper grazing (*ra'y*) of animals. Most of primary sources with this respect mention a manual-like textual source, known as "the manuscript of Saxony". While the exact content being unknown, this manuscript seems important due to the fame of Saxony as the most successful example for breeding merino sheep across the Europe. Furthermore, this manuscript is ordered to be translated into Turkish, Bulgarian, and Greek and to be accessible for the places to which the merino ram is transferred.[118] Almost one year after this translation order, in 19 February 1847, another document mentions once more the urgency of translating this manuscript to Ottoman Turkish, which is again about the grazing and management of sheep in Saxony. This time the manuscript is translated by Armenian Höce Kigork, who is one of the chief-shepherds in the imperial landed estates before Halil Efendi, to Turkish by using Armenian letters, and it is ordered to convert the manuscript into Turkish letters.[119]

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dilediklerine füruht kılınmak üzere icab edenler ile bi'l-müzakere karar keyfiyetin işarı zımmında icabına göre Selanik ve Tırhala ... izamına istilamnameler gönderilmesi …"

[118] BOA, *HH.d 255*, 84. 3 March 1846 (5 Rebiyülevvel 1262). "Çiftlikât-ı şahanenin merinoz ağnamına **…** ittihazıyla memalik-i mahruse-yi mülükanenin mümkün'ül-husul olan mahallerinde yetiştirilmek üzere iktiza edenlere demir baş suretiyle **…** merinoz koçlarının verilmesi muhsenat-ı 'adireyi müstelzem olduğundan bu hususa dair kaleme alınan müzakere çaki-pa'yı mekarim-paye-yi hazret-i padişahiye arz ve takdim olunmuş olub zikr olunan koçlarına yanlarına eğerçe mütezammın çobanlar terfik olunacak ise de taleb olunacak eshab-ı ağnama ve ra'y edecek sair çobanlar dahi usul-ı idaresi bi'l-etraf tedkik-**i** lazımeden ve merinoz ağnamının en alası Saksonya ülkesinde olduğu hasb'ül-tahkik ve izmandan olduğuna binaen ağnam-ı mezbureye mütedair olan risale-yi mahsusenin marifet-i 'âli-yi asıfaneleriyle ol-tarafdan bi'l-celb Türkçe ve Bulgar ve Rumca tab' ettirilerek neşr olunması emr-ü-irade-yi keramet ifade-yi cenab-ı taçdari iktiza-yı alisinden olmağla icra-yı icabı mütevakıf-ı himem seniye-yi … "

[119] BOA, *HH.d 616*, 87. 19 February 1847 (3 Rebiyülevvel 1263). "Memalik-i mahruse-yi şahanenin kabl'ül-husul olan mahallerinde merinoz ağnamı yetiştirilmesine dair tedabir-i mukteziye ve mümküne keyfiyeti bundan akdem arz ve istizan olunarak icra-yı iktizasına irade-yi ihsan-ade-yi hazret-i padişahi şeref-sunuh buyrulmuş ve mukaddeme-yi tedabirden olarak usul-ı ra'yi ve idaresi hakkında Avrupaca mukayyid olan risale-yi mahsusa tedarik ve elsine -yi meşhure üzere tercüme olunub talimhane-yi lazıme ile beraber iktiza eden mahallere irsali takdir olunduğundan mezkur risalenin Saksonya tarafından celbi hususu canib-i nezaret-i celile-yi hariciyeye ifade olunmuş ve ol aralık devletlü fehametlü sadrazam hazretlerinin çiftlik müdiri Höce Kigorkun ol babda ağnamın suret-i idaresine dahi tahsil-i malumat etmiş olduğu ve matlub olunan risale onda mevcud idüğü Barutçubaşı Höce Avanes [Evans/Ohannes] kablinden ihbar olunmasıyla mersum Kigork nezd-i aciziye celb olunarak risale-yi mezkurenin tercüme olunması sipariş kılınmış idi geçenlerde yazısı

3.3.3 Beyond wool: Silk and cotton

While the wool production has an undeniable institutional primacy and relevancy among all productive activities, what the correspondences between the estate management and central authorities suggest is that there were several attempts to produce silk and cotton in the imperial landed estates of Mihaliç. In 3 February 1846, the central state authorizes a transaction of 23,500 *guruş* to bring some skillful cotton masters and seeds and then initiate cotton production in the landed estates of Mihaliç.[120] Being unknown in terms of their origin for a while, in another document dated 3 January 1847, it is mentioned that both the masters and the seeds are ordered to be transferred from the United States.[121][122] Regarding the silk production, in the same document mentioning the need for translating the manuscript on grazing of merino sheep in Saxony, there is another manuscript on silk production published in

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Ermenice okunuşu Türkçe olarak ettiği tercümeyi getürmüş olduğunu yazısı dahi Türkçe olmak üzere yazdırıldıktan sonra elsine-yi meşhure üzere risale-yi mütenevvi'anın bit-tesviye takdim kılınacağı ve bi-lütfullah-ı-teali saye-yi mülk-perver-i cenab-ı cihan-banide ahali ve teba bu yüzden dahi menafi'-i ve faydaya mazhar olacakları misüllü müşarileyh hazretlerinin bir müddetten berü tercümanlık hizmetiyle melfuf ve ipek hakkında malumat ile mevsuf olan Höce Agob Avrupaca ipek hakkında mütedavil olan risaleyi Ermeni'ül-ibare tercüme etmiş olduğundan bu dahi elsine-yi meşhure ile tercüme olunub ipek hasıl olan mahallere irsali takdirinde kavaid-i umumiye olacağı mersum Höce Avanes tarafından beyan ve ihtar olunmuşdur …"

[120] BOA *HH.d 255*, 85. 3 February 1846 (6 Safer 1262) "Leffen takdim kılınan bir kıta tezkire-yi acizi mütalaasından keyfiyet-i rahiyet ilm-i 'âlileri buyrulacağı vechle çiftlikat-ı şahane arazisinde â'la penbe yetiştirilmek üzere gelecek ustaların harcırahlarıyla gönderecekleri tohum bahasına mahsuben alel-hesab olarak 23.500 guruşun itası hususuna irade-yi seniye-yi cenab-ı mülükane müteallik buyrulmuş olmağla iktizasının icrasıyla keyfiyet-i malum olmak içün fabrika-yı hümayun ceridesine bir kıta ilmühaberin tahrirat ve itası babında emr-ü-ferman hazret-i menle'ül-emrindir"

[121] BOA *HH.d 255*, 88. 3 January 1847 (15 Muharrem 1263) "Leffen takdim-i huzur-ı samileri kılınan bir kıta tezkire-yi acizi mütalaasından keyfiyet malum olanları buyrulacağı vechle Amerika tarafından celb olunan penbeci ustasının harcırahuyla tohum basına mahsuben alel-hesab olarak otuz dokuz bin bu kadar guruşun darbhane-yi amireden itası hususuna irade-yi seniye-yi cenab-ı mülükane müteallik buyrulmuş olmağla iktizasının icrasıyla keyfiyet malum olmak içün fabrika-yı hümayunlar ceridesine bir kıta ilmühaberinini tahrir ve itası babında emr-ü-ferman hazret-i menle'ül-emrindir "

[122] Regarding American and Anatolian cotton, it is stated that there was not a remarkable difference in quality except American cotton having longer staples. But the major difference was the price competition of American cotton over Anatolian one in the international markets in the 1840s. See Teoman and Kaymak, "Commercial Agriculture and Economic Change in the Ottoman Empire during the Nineteenth Century: A Comparison of Raw Cotton Production in Western Anatolia and Egypt," 321.

Europe and which is again translated into Turkish by using Armenian letters this time by Höce Agob. The silk manuscript is further ordered to be converted to Turkish letters. Different than the manuscript of Saxony, it is suggested to send this silk manuscript to the places where it can be useful and instructive for silk producers.[123]

What the preparations for cotton and silk production may imply is that the central state is aware of the places outside of empire where these crops are successfully produced, but still believes that the relevant technical knowledge is necessary to be spread among producers to have similar outcomes. Or, the silk and cotton production at least in the region does not reach a satisfying level and the authorities may have thought that it is a good idea to bring the know-how and personnel – in the case of cotton – to the estates from overseas to support the producers as a general and blurred category. As long as the accounting books are concerned, there are no entries neither at monthly nor annual level that support the possibility that the imperial landed estates produce silk or cotton. To be cautious, it is also hard to be sure whether the American silk master had successfully made his way with the seeds to the imperial landed estates. Or, if he had arrived, it is still unknown whether and where the seeds are sown.

[123] BOA, *HH.d 616*, 87. 19 February 1847 (3 Rebiyülevvel 1263) "… geçenlerde yazısı Ermenice okunuşu Türkçe olarak ettiği tercümeyi getürmüş olduğunu yazısı dahi Türkçe olmak üzere yazdırıldıktan sonra elsine-yi meşhure üzere risale-yi mütenevvi'anın bit-tesviye takdim kılınacağı ve bi-lütfullah-ı-teali saye-yi mülk-perver-i cenab-ı cihan-banide ahali ve teba bu yüzden dahi menafi'-i ve faydaya mazhar olacakları misüllü müşarileyh hazretlerinin bir müddetten berü tercümanlık hizmetiyle melfuf ve ipek hakkında malumat ile mevsuf olan Höce Agob Avrupaca ipek hakkında mütedavil olan risaleyi Ermeni'ül-ibare tercüme etmiş olduğundan bu dahi elsine-yi meşhure ile tercüme olunub ipek hasıl olan mahallere irsali takdirinde kavaid-i umumiye olacağı mersum Höce Avanes tarafından beyan ve ihtar olunmuşdur …"

3.3.4 Beyond Mihaliç: Imperial landed estates as imperial laboratories

Beyond the regional aspect studied through agrarian labor organization and stockbreeding, the inclusion of other imperial spaces in the Balkans raises very important questions regarding the further coordination among and across the imperial landed estates. It seems that the incorporation of imperial landed estates in Selanik and Tırhala makes considerable sense due to the practical and strategical concerns like increasing the chances of breeding merino sheep. More than that, several possibilities can be specified. First, from the perspective of spatial division of labor at the core imperial level, the manufactural facilities launched to improve the textile production in the mid-nineteenth century are located considerably close to Istanbul. And, wool as the primary input is provided by imperial landed estates again located close to the imperial center. For example, the imperial landed estates in Edirne and Hayrabolu seemed to supply the wool for *Feshane,* while the imperial landed estates of Mihaliç did the same for the factory in İzmit.

Second, in addition to this spatial division of labor and despite the relatively longer distance of the Balkans to the imperial center, the interregional coordination among Mihaliç, Selanik, and Tırhala may imply a form of administrative unity, rather than an economic one. While Mihaliç is destined to provide breeding merino rams as the major imperial hub, it is interesting to ask what other factors apart from the physical distance could have been influential on the central state's decisions on not making these large investments either to the landed estates in Selanik or Tırhala. For example, as in the case of imperial landed estates of Tırhala, Alp Yücel Kaya notes that "the profit from cultivating land was much higher (from 2 to 7 times) than the rent from uncultivated land" in the mid-nineteenth century. And, according to the

economist Ion Ionescu's inspection of the region which showed the relative abundance of land compared to the scarcity of labor, the profitability of cultivation may be one of the reasons for landlords who "preferred to associate with laborers to invest their capital in land".[124] Although the exact yields from cultivating land are unknown for Mihaliç, the region is similar to Tırhala for land being abundant and labor being scarce. Then, if the imperial landed estates in Tırhala are assumed to be more profitable for cultivation than the ones in Mihaliç, is it possible to treat the profitability of land as one of the major reasons for not bringing the imperial flocks to Tırhala in the first place? Or, if the venues in Mihaliç and Tırhala are assumed to be feasibly exploitable for the central administration for various purposes, can the choice of bringing thousands of sheep to the plain of Mihaliç, especially given its pestiferous conditions, be seen as a bold one? And, if it is the easier transfer of wool from Mihaliç to İzmit through river navigation, can one say that the central state takes the risk of diseases for the sake of cheaper and safer logistics of production?

Acknowledging the difficulty of answering these questions, it may be also wrong to assume and attribute a more systematic form of geographical awareness of the Ottoman state in making of these decisions in the mid-nineteenth century. The production and systematization of the knowledge of physical environment goes hand in hand with the more direct inclusion of the central state at the local level as in the case of imperial landed estates of Mihaliç. And such inclusion does not necessarily imply all minute calculations had been done and all risks were considered quite before stepping in to a certain locality. On the contrary, as the format of primary sources clearly shows, all of the challenges that the estate management faces appear and become a matter of management after the establishment, hence, during the

[124] Kaya, "On the *Çiftlik* Regulation in Tırhala in the Mid Nineteenth Century: Economists, Pashas, Governors, *Çiftlik*-Holders, *Subaşı*s, and Sharecroppers," 338.

running of the estates. This implies that especially the imperial landed estates in Mihaliç -but also others- can be seen as natural laboratories for enabling the central administration to make numerous trials, errors, and decisions. It is not to assume that the results of these trials would be yielding the best or the most efficient ones for all human and extra-human actors. Instead, as in the case of grazing imperial flocks, after the urgent need of summer pastures of the estates, which is indeed a human-induced urgency in the first place, the expansion of pastures was a short-run solution that was weighted over the alternative of sowing meadow seeds that would be beneficial in the long-run.

3.4 Imperial landed estates as environment-making

Started with the detecting long climatic trends and their possible outcomes in the Eastern Mediterranean basin, it is argued that the plain of Mihaliç should be considered both as one of regions affected by the climatic changes and as a separate unit of analysis partly because of the possibility of being more exposed the fluvial activities brought by the Little Ice Age due to the rich river network in the plain bracketed by two lakes on the east-west axis. Also, it is argued that the same river network may have allowed its humans to the reach the Sea of Marmara without going to the city Bursa for transportation. An inclusion of climate and physical geography into the analysis enabled me to introduce the physical conditions within which the imperial landed estates of Mihaliç are founded. In this environment of production, the considerable efforts spent to reconstruct the region for agriculture are regarded not as random and arbitrary actions of the central administration, but a

reflection more complicated and long-lasted climatic events and certain historical responses to deal with them.

While the climatic changes of the Little Ice Age being observable in the plain mostly through the incidents of malaria and emergences of swamps, I argued that the spatial division of labor within the complex of imperial landed estates shows the presence of diverse labor organization and land regimes. By doing so, I argued that despite the scale and scope of climatic events having a say on the physical conditions, they do not completely determine – or homogeneously affect -– the production process as a historically particular way of organizing land and labor in a certain locality. Regarding the production of labor-intensive goods (rice, maize, sesame, tobacco, onion, garlic etc.), it is shown that some estates are more noticeable than the others both in quantity and organization of production. It was the production of more labor-intensive crops that correlated with the presence of intermediary body of appointed officials, sharecropping and share-tenancy arrangements. Further, these arrangements were not the same in terms of their content, rather they differed from each other through varieties in renting land, providing necessary equipment and tools, assuring accommodation and food supply, and sharing costs of production. Coupled with these organizational varieties, the absence of these arrangements in the production of essential crops (wheat, barley, oat, tare), for the estate management, reflects a way of cost minimization by avoiding a more direct inclusion to the production of labor-intensive crops but still appropriating the crops in quantity, not dominantly their cash equivalents. Therefore, the diversity in labor organization and land regimes does not fit completely into the capitalistic logic of profit maximization, mostly expressed in monetary terms. With a certain level of ambiguities and uncertainties in detecting the direct laborers and peasants in agriculture, I raised the

possibility that the establishment of the imperial landed estates may radically alter the agrarian relations of production, through intensifying them given the attempts to sedentarize nomadic tribes and Crimean immigrants as documented in the second chapter.

Since it is the cost minimization that characterized the engagements of the estate management with the human and physical geography, the picture was remarkably different for stockbreeding. I argued that the management of agrarian relations and production may be more familiar to the Ottoman statecraft than stockbreeding by bringing almost twenty-thousand sheep from different regions of the empire. Benefiting from earlier inspections of the individual estates, which showed that two-third of total area as categorized as pastures, it is discussed that the constant search of pastures for the estates is more related to the nutritional quality of pastures rather than quantity. The materials used for healing diseases among animals further supported the issue of quality by showing that the imperial flocks were exposed to the pestiferous conditions in the plain and they had unhealthy diet causing them to suffer from intestinal worms. Furthermore, the correspondences between central and local authorities clearly showed that the urgency of finding pastures pushed the estate management to occupy pastures in higher altitudes at the expense of displacing the Turkman nomads. Along with this displacement, by dismissing the alternative of sowing meadow seeds that would yield more beneficial outcomes in the long-run, the estates seemed more like a destructive power –not a constructive one- by creating a pressure of overgrazing through the imperial flocks. In addition to pastures, the technical (and even scientific) aspect of stockbreeding to successfully breed merino sheep showed that earlier calculations and expectations of the central administration. The incorporation of other imperial landed estates in the Balkans

with the same purpose, however, displayed that the success in breeding is expected to come by increasing the number of trials by sending merino rams from Mihaliç. If it is possible to name such incorporation as an experiment (as in the case of cotton and silk also), I argued that the imperial landed estates can be seen as imperial laboratories for enabling the estate management to learn by numerous trials and errors, without assuming the results would be *the* optimum.

If one tries to imagine the imperial landed estates of Mihaliç as a contemporary capitalist agrarian enterprise launched to produce great quantities of wool as an input to factories, the picture is going to be quite different. In that case, it would be expected that the state authorities –in guise of entrepreneurs- had been preparing broad feasibility reports on producing wool through breeding merino sheep in Mihaliç. Among many factors affecting the cost of production, the risk of diseases to be spread among the flocks would be taken into account *before* taking any action, since they may threaten the health of the primary assets. The physical space would be already divided by a matrix of property relations. In case that the enterprise would need to rent or purchase something within that physical space, any item having an operational use-value (pastures, sheepfolds etc.) would be entering right into the expense column the balance sheet as an exchange-value manifested in cash terms. The labor force in the facilities would be composed of (i) managerial body having a variety of responsibilities, (ii) professional veterinarians for checking the health of animals and probably managing the breeding of merino sheep, (iii) wage-laborers of various specialized skills for tasks like herding and shearing sheep, packing and transferring wool and so on. If the capitalist entrepreneur also owned some other land which can be organized both to produce crops for feeding animals and laborers and commercially-valuable goods, there would be a variety of arrangements in the

benefit of the entrepreneur, for maximizing his/her profits. The presence of such variety would not be surprising or irrational because at the end of day everything would be expressed in monetary terms, and the balance sheet would be the mirror of entrepreneurial success.

Partly contrary to this model of capitalist enterprise, even bringing merino sheep to the plain of Mihaliç without calculating risks proves why the imperial landed estates of Mihaliç neither can be seen as a completely rational capitalist enterprise, nor a non-capitalist one. The presence of voluminous entries in the primary sources regarding the diseases and search for pastures after bringing the flocks cannot fit into the logic of capitalist risk-management. The perception of physical environment for the estate management is not of the capitalist entrepreneur's which is expressed as a pure combination of use-values and exchange-values. Or, the physical environment in the perception the estate management is not totally conquered by the world of commodities, or the nature had not yet become a completely measurable, quantifiable, and abstracted category, but in the making. This spectrum of absences and presences for the imperial landed estates does not simply mean entrepreneurial incapability or mismanagement. Rather they show that the production of knowledge of physical environment cannot be thought independent of the relations of production *in* the physical environment.[125] And it is the relations of production, beyond being strictly economic one, which makes its environment through a set of interdependent processes.[126]

[125] Moore, "The Capitalocene, Part I: On Nature and Origins of Our Ecological Crisis," 605. Moore states that "Capitalism's first great remaking of planetary life … was scarcely possible without a revolution in ways of thinking and seeing the world. The capitalist revolution, far from a narrowly economic process, was an epochal shift in the ways of earth-moving (mining, farming), state-making, mechanization and symbolic praxis."

[126] Parenti, "Environment-Making in the Capitalocene: Political Ecology of the State," 167-170. Parenti proposes to consider the state as "an inherently environmental entity, and as such, it is at the heart of value form" because the state delivers "the use values of nonhuman nature" to capital.

The whole estate phenomenon, therefore, is an emerging value-relation at varying degrees in the absence of fully institutionalized private property rights in legal terms. The production of wool, as the major commodity, is the process of displacing the Bulgarians from Balkans and the Turkmans from the mountains. It is a process turning sheep into the means of production and almost to the private property of the estates, to be protected against all threats. It a process of becoming more aware of various use-values within nature, among which the pastures are of paramount importance, then directing them to the value-production at the expense of overexploitation through overgrazing. The production of essential crops is clung to the wool production both as being provider of an easier and maybe cheaper source of reproduction of labor and well-being of the sheep by assuring animal feed. The relations of cereal production, within itself, is again a process of proletarianization characterized by a series of attempts to sedentarize the nomadic tribes and Crimean immigrants within the estates. The production of labor-intensive crops, which concerns the estate management not because of its direct relevancy to the wool production but as an additional economic source, is more nuanced. It is either receiving rice in the name of *rent*, or appropriating tobacco, maize, and sesame through varying degrees of participation into the production process. What is distinctive in this complex web of processes is the interdependency of each constituent to one another. And, it is the very environment, not as an ideal existing by its own, but as a unit that contains and is contained by the multiple relations of production bringing nature to work for capital.

Moreover, he highlights that "modern state's territoriality delivers nonhuman nature to capital accumulation by way of its place-based property regimes, its production of infrastructure, and its scientific and intellectual practices that make nonhuman nature legible and thus accessible". Quoting the famous phrase of Karl Marx, Parenti notes that "waterfall-owning capitalist stands as a steward – and a hangman ready to enforce property rights", and thereby "the state is the ultimate 'landlord' " because "it controls nonhuman nature's use values, and delivers these rents into capital".

CHAPTER 4

IMPERIAL LANDED ESTATES AS A SOCIAL METABOLISM (*STOFFWECHSEL*)

> "Besides the actual buying and selling, labour-time is spent on book-keeping, which requires pens, ink, paper, desks and other office equipment as well as objectified labour. Thus it is spent in this function both as labour-power and as means of labour. In this connection, the same state of affairs obtains as with buying and selling time."[127]

In the second and third chapters, I treated most of primary sources as a collection of archival material by the help of which I discussed the imperial landed estates of Mihaliç from two major aspects. First, as an example of state-enterprises in the mid nineteenth century Ottoman Empire, I depicted the diffusion of and cooperation among local and central branches of state machinery, especially in the second chapter. This diffusion revealed several novel aspects regarding the structure of finance and variety of fiscal tools to undertake such an economic activity physically distant from the imperial center. Such physical distance from the center, in turn, required me to relatively distance my analysis from institutions, and focus more on the physical conditions of the plain on which the estates are established. Following that, in the third chapter, I approached the imperial landed estates of Mihaliç as an environment-making process by including both long-term climatic processes as a vector in shaping the physical space. Then discussed how the relations of production reveal unequal power relations among different economic agents being decisive in the last instance and in putting nature and labor into work in a certain manner and for a certain end.

[127] Marx, *Capital: A Critique of Political Economy*, 211.

In this chapter, however, I investigate the structure and content of archival material, mostly of accounting books, to see the economic mentality behind production of these sources. In other words, the previous chapters are characterized by carving out historical and geographical relations embedded in and contained by a variety of archival sources, but this chapter questions the historicity of the material itself. As implied in the epigraph, even the seemingly simple act of book-keeping tells a lot by itself. For example, the clerk (*katib*) is a wage-laborer whose means of production (paper, desk, pens, ink) are external to him. He prepares the accounting books according to certain order and pattern being external as much as pen and paper to him. The unity of multiple production processes scattered within in a certain geography – the plain of Mihaliç in this case– first becomes a unity in his head. All sort of information contained in the accounting books should reach him through many mediators in first instance. In this sense, as much as he occupies a noticeable role in the technical division of labor within the imperial landed estates, he is nothing without the social division of labor in general. Without peasants cultivating land for the estates and Bulgarian shepherds grazing the imperial flocks for imperial factories he does not have anything to record. Without pens and papers produced by someone elsewhere, he does not have any tool to record.

Hence, the presence of clerk is a multidimensional phenomenon. From tools and codes of recording, it displays the interconnectedness and interdependency of human activities (within and beyond the plain of Mihaliç) to each other. While recording can be seen as a proof of such interdependency, it cannot be expected to be solely special to the imperial landed estates of Mihaliç in the mid-nineteenth century Ottoman Empire. The act of recording is not invented by the Ottomans with the establishment of imperial landed estates of Mihaliç. Many characteristics may have

been detected similar both to the contemporary and previous examples. Therefore, rather than a paleographic discussion that should be based on extensive comparison and analysis of archival material, I prefer approaching the sources through giving primacy to the production processes in the plain of Mihaliç. Recording should be a matter of production in the first place, then a paleographical one. In doing so, I benefit from the concept of metabolism (*Stoffwechsel*) in a historical materialist sense.

In *Grundrisse*, also in many other occasions (most notably in *Capital*), Karl Marx differentiates labor process in general and in particular from each other. [128] Labor process in general simply implies that in any point in human history there are three major steps as production, appropriation, and distribution. Asking altogether the questions of who produces, who appropriates, and how the produce is distributed would offer an entry point for detecting the relations of production. Labor process in particular, in turn, would allow us to historically situate and differentiate the dominant relations of production in certain time and geography, as in the case of different modes of production in human history (slavery, feudalism, capitalism etc.).[129] And, each historically specific mode of production would have its own mechanisms for the reproduction of the relations. In other words, production and reproduction always constitute an inseparable, yet together moving entity in a society. Rather than embarking on a discussion of mode(s) of production, what I want to draw attention on is the historical materialist stance of inclusion of all stages of production, corresponding class relations, and mechanisms of reproduction (resting in different spheres like circulation, exchange, finance, ideology etc.) in a society to

[128] Marx, *Grundrisse*, 86-89

[129] Marx, *Grundrisse*, 106-107. "In all forms of society there is one specific kind of production which predominates over the rest, whose relations thus assign rank and influence of others. It is a general illumination which bathes all the other colours and modifies their particularity."

have a holistic understanding of multiple scales and units of analysis. And, the concept of metabolism in Marx originally addresses both the totality of human actions and how the humankind regulates the relations between itself and nature. John Bellamy Foster, for instance, states that "metabolism" became a fully-fledged concept in *Capital* to "define the labor process as 'a process between man and nature, a process by which man, through his actions, mediates, regulates and controls the metabolism between himself and nature'."[130] Similar to the differentiation between production in general and particular production, metabolism can –or should- be defined in a time-sensitive way. At this point, Foster quotes "irreparable rift" in metabolism from Marx's original writings in order to highlight that it was capitalism which separated town and country in an antagonistic fashion in bourgeois society.[131] This separation of town and country is also well manifested at global level between colonizers and colonies.[132]

A more nuanced understanding of metabolism and metabolic rift, in a direct dialogue with Foster, comes from Jason W. Moore. Moore argues that capitalism does not "produce a metabolic rift" but "it *is* a metabolic rift" that allows "successive recompositions of capitalist space".[133] According to Moore, the concept of metabolism allows us to reposition "the socioecological contradictions *internal* to the development of capitalism."[134] In other words, the rift in capitalist metabolism should not be considered secondary to the operations of capitalism. The value-

[130] Foster, *Marx's Ecology: Materialism and Nature,* 141.

[131] Foster, *Marx's Ecology: Materialism and Nature,* 141-142.

[132] Foster, *Marx's Ecology: Materialism and Nature,* 164.

[133] Moore, "Transcending the Metabolic Rift: A Theory of Crises in the Capitalist World-Ecology," 6-7.

[134] Moore, "Transcending the Metabolic Rift: A Theory of Crises in the Capitalist World-Ecology," 7-8.

production in capitalism does not work through binaries, but rather a historically specific mode of organizing town and county, "as a relational expression of the underlying contradiction between value and use-value in historical capitalism."[135] Elsewhere, Moore suggests approaching capitalist metabolism as "a quantum leap forward in the scale, scope and speed of ecological degradation".[136] And concomitantly, on the other side of coin, there has been "accumulation, crisis, and world development" operating at "multiple geographical scales".[137]

Apparently recent discussions on the concept of metabolism expend over the contradictions of capitalism well-manifested through ongoing environmental crises across the world. Within the scope of this study, however, I employ the concept to merge and present the different facets of activities taking place in the imperial landed estates of Mihaliç in a holistic manner. As the foci points and different units of analysis in the previous chapters suggest, I argue that institutions, environment and economy should be seen the major constituents of social metabolism, and they should be treated altogether. In other words, allowing me to approach the same phenomenon from multiple aspects, the trinity of institutions, environment, and economy opens up new dimensions to be explored, except it misses one: the mode of book-keeping and the relations of accumulation.

In what follows, I argue that the account keeping in the imperial landed estates of Mihaliç is one of labor processes which left unstudied in the previous chapters. It is particularly important point because the information on the metabolism comes from the accounting books as the description of the metabolism, itself. Moreover, by the help of perceiving book-keeping as a labor process, I argue that the

[135] Moore, Transcending the Metabolic Rift: A Theory of Crises in the Capitalist World-Ecology," 7.

[136] Moore, "Nature and the Transition from Feudalism to Capitalism," 99.

[137] Moore, "Capitalism as World-Ecology: Braudel and Marx on Environmental History," 453.

mode of account-keeping displays how the land, labor, and tools –echoing the trinity of institutions, environment, and economy- comes under the sway of capital in the mid-nineteenth century Ottoman Empire. In the last section, expanding over the unity of and within multiplicity, I introduce the possible directions of accumulation resting within and beyond the imperial landed estates of Mihaliç. It is simply because of being capable of answering who would benefit from the operations of the estates and whether the estates are profitable or not.

4.1 Account keeping as a labor process

Being said that account keeping is neither invented by the Ottomans nor in the nineteenth century, in the Ottoman studies there has been moderate attention to the accounting books as a body of sources to be analyzed in a more systematic manner.[138] Along with acknowledging the fact that a great deal of this inadequacy stems from the availability of archival material, the scholars who study these sources do not have comprehensive understanding. For example, the most voluminous work on the history of accounting in Turkic states was written by Oktay Güvemli in three volumes starting from earlier Turkic states, covering the Ottoman Empire, and ending up with the Turkish Republic. In his survey of history of account-keeping across the world, among many other things, Güvemli touches upon on the issue of single-entry versus double-entry accounting systems in the Ottoman Empire. Single-

[138] On these issues, Kayhan Orbay studies the accounting books of *waqf*s of different origins. See: Orbay, "The Economic Efficiency of Imperial Waqfs in the Ototman Empire". Also, Orbay, "Structure and Content of the Waqf Account Books As Sources For Ottoman Economic and Institutional History". Also, Orbay, "Account Books of the Imperial Waqfs (Charitable Endowments) in the Eastern Mediterranean (15th to 19th Centuries)."

entry system implies that the either expense or revenue, each item or transaction in books is recorded back to back with a description including a combination of date, amount, parties etc. Double-entry system, on the other hand, corresponds to the standardization in accounting, which is based on the naturalization or assumption of distinction between asset and liability in an enterprise. As much as it is a mode of account-keeping, in double-entry system, what we see is that capital and the complicated mass of monetary transactions among multiple actors recorded following the logic of simultaneously recording what is owned and owed by an entrepreneur. Given the double-entry accounting in the Ottoman Empire first being adopted by the Imperial Navy in 1883,[139][140] the accounting books of the imperial landed estates of Mihaliç, and most state-produced records preceding 1883, has a single-entry accounting system. Although this chapter does not deal with the origins of double-entry system in the empire, within the context of state enterprises after the *Tanzimat*, Güvemli claims that these enterprises were not profit- and market-driven therefore double-entry system had to wait until the last quarter of the century.[141] In other words, Güvemli correlates the complexity of economic relations resembled by double-entry accounting with the production for market and profit, including the case of state enterprises.

What I argue is that the lack of profit- and market-driven motivations cannot tell the whole story for several reasons. First, even it is assumed to be so, it would be still open to question why the double entry system in the empire then first was adopted by a military institution. Second, as stated in the very beginning of this study,

[139] Güvemli, *Türk Devletleri Muhasebe Tarihi: Tanzimat'tan Cumhuriyete,* 188.

[140] Outside the bureaucratic sphere, the double-entry account-keeping was used by merchants quite before the late nineteenth century. See: Louis, "Market liquidity, entrepreneurial strategy and cash flow in post-1821 Cyprus: the case of Yeorgakis Markantonides."

[141] Güvemli, *Türk Devletleri Muhasebe Tarihi: Tanzimat'tan Cumhuriyete*, 43-44.

the major reason for the establishment of imperial landed estates of Mihaliç in state documents is explained as strengthening of treasuries. If there is not an urge to directly profit from state enterprises or indirectly profit by lessening the dependency to the international wool markets, then how one would explain the strengthening of treasuries. An answer this chapter gives is that the picture is more complicated than reducing the issue of account-keeping to subsidiary fact to economic performance, rather it occupies a crucial role. It is because account-keeping is (i) a labor process characterized more by a spending of intellectual labor in certain orders and (ii) the mode of account keeping bears an importance for being an outcome of certain mentality. Seeing account-keeping as a separate labor process, thereby, gives a relative autonomy to the process itself to be examined both in relation to and isolation from the economic activity. At this point, the accounting-books of imperial landed estates open up new horizons to discuss the episteme of recording and metabolism.

4.1.1 Profit as a function of wealth

In the second chapter, I introduced the format of the accounting books of the imperial landed estates and showed that these books recorded monetary net expenses meticulously on monthly basis. For each month, the monetary value of expenses outnumbered the revenues. As expected, in annual calculations, the imperial landed estates would not be profiting unless they have great sources of revenue (not apparent at monthly level) to cover up the sum of monthly expenses. Based on my careful examination of the accounting books, despite the estates not having annual

revenues enough to cover monthly expenses, in final calculations the estates are always reported to be profitable. It is also interesting because in the absence of massive revenues appearing at the annual level, even more annual expenses like taxes get into the picture but the estates still profit, they are not at a loss. Right after deducing many expenses, the net revenue (*varidat-i asliye*) is always positive (Table 9).

Table 9. The Revenue and Cost of Imperial Landed Estates in and around Mihaliç on the Accounts of Year 1847-48

Produce	*Guruş*
Cereals, wool and other revenues	360,114
New-born lambs of various races [dead subtracted]	289,040
New-born animals of different kinds [dead subtracted]	6565
	642,720
Cost	*Guruş*
Monetary value of payments in-kind given to shepherds, wage-laborers and others	134,412
Salaries and expenses of officials and others	290,873
Transfer of value of payments in-kind to the year of 1265	0
Imperial landed estates' share in tax	9255
Capital (*mal*) belonging to the treasury of imperial *waqfs* at the hands of imperial landed estates	13,625
	418,167
Net Revenue	228,552

Mihaliç ve havalisinde kain çiftlikat-ı şahanenin 264 senesine mahsuben hasılat ve mesarifat-ı vakıasını mutazmmın diğer arz ve takdim olunan hülasanın hülasa'ül-hülasasıdır

	Guruş
Hasılat	360,114
Zehair ve yapağı ve saire hasılatı	289,040
Tevlid eden ecnas-ı kuzu bedel-i gayr-i ez telefat esmanı müferredesi	6565
Tevlid eden ecnas-ı hayvanatın gayr-i ez telefat-ı esman müfedderesi	642,720
	Guruş
Elmesarifat	134,412
Çoban ve ırgad ve saireye verilen tayinat-ı ayniye esmanı	290,873
Memurin ve saire maaşıyla mesarif-i vakıası	0
Erzak esmanı olarak 65 senesi hesabına mevcud kayd olunan Çiftlikat-ı şahanenin hisse-yi vergüsü	9255
Çiftlikat-ı merkumenin evkaf-ı hümayun hazinesine ait malı	13,625
	418,167
Varidat-ı aslıye[142]	228,552

Source: BOA, *HH.d 617*, 3-19. See Figure A4 and Figure A5 for the original document.

[142] The phrase "varidat-ı asliye" is mentioned repeatedly and it is the phrase preferred while reporting annual summaries to the Inner Treasury See BOA, *HH.d 617*. 19. "Mihaliçde kain çiftlikât-ı şahanenin [12]64 senesi mart ibtidasından şubatı nihayetine değin bir sene zarfında vuku'a gelen bi'l-cümle hasılatıyla mesarifatının mikdar-ı mevcudunun kemiyetini mübeyyin Mihaliç meclisinden balası defterlü varid olan bir kıta mazbatası bi't-tanzim muvafik-ı kuyud olduğundan leffen ve li'ecl'ül-suhule terkim kılınan hülasa dahi merbuten takdim kılınmışdır mütala'alarından istifade buyrulacağı vechle çiftlikat-ı merkumenin sene-yi mezkure hasılatı 6 yük 46.720 guruşa baliğ olup meblağ-ı mezburdan bir senelik kaffe-yi mesarifatıyla memurin maaşı olan 4 yük 18.167 guruş bi'l-deyn kusur 2 yük 28.552 guruş çiftlikat-ı merkumenin varidat-ı aslıyesi demek bulunmuşdur …"

Although my first response was that I was making mistakes during adding or subtracting numbers, I noticed that it was not me making miscalculations. The most striking characteristic of accounting-books is not related to distinction of single- versus double-entry accounting systems, but how the profit and revenue is perceived in the context of imperial landed estates of Mihaliç. My explanation to this dilemma is that the Ottomans consider what they have in their inventory at a moment and having a monetary value as the ultimate source of revenue. In other words, animals, tools, cereals in the storehouse etc. are recorded as revenue, even they are not sold in the market. Although it is expected that what is kept in the inventory can be seen as potential income for an enterprise if they are sold in the market, here in the case of imperial landed estates, the inventory with its potential monetary value enters into the actual calculations and are not stated separately.[143]

Moreover, at the annual level, if the estates sell some part of the annual produce or animals, the sum of these sales are subtracted from the total value of inventory. In other words, the realized sales out of produce –at the end of which cash enters to the pocket- decreases the estates' revenues. It is only possible if the accounts consider the monetary value of inventory as the major source of revenue itself and then the sales only reduce this potential. In parallel to this way of thinking, since purchases increase the volume of inventory, they also enter as positive values to the revenue calculations. Despite money is spent during purchases (i.e. money leaves the pocket) the inventory is enriched because new items having monetary values entered[144] (Table 10).

[143] In contemporary accounting, sales out of inventory are separated separately and they enter into revenue.

[144] At this point another question arises. If the revenues decrease by earning money, or they increase by losing money and profit because the inventory is seen as the ultimate source of revenue, what does really happen to the balance between money earned and lost regardless of the particular perception of inventory?

Table 10. Example of Revenue Calculations[145]

Girdi	*Guruş*	Entries	*Guruş*
63 senesi hasılatı	143,183	The Produce in 1263 [1846-47]	143,183
füruht	8472	Sales	8472
64 senesine kalan	134,711	Amount to be transferred to 1264	134,711
63 senesi mübaya'atı	1258	Purchases in 1263	1258
	144,441		144,441
64 senesi hasılatı	68,318	The Produce in 1264 [1847-48]	68,318
füruht olunan zehair	1995	Sales	1995
	66,323		66,323

Source: BOA, *HH.d 617.* 17. See the original document in Figure A4.

Another point worth of mentioning is the almost synonymous use of revenue (*varidat*[146]) and produce (*hasılat*[147]) with each other. In final annual calculations (Table 9), while the revenues of the imperial estates are enlisted under the category of produce (*hasılat*), at the end of calculations net revenues (*varidat-ı asliye*) is found. I think that such use is representative of the mentality behind account-keeping. Since category of produce is found by adding up monetary values of agrarian produce and animal stock, what is emphasized by using this word is the use-values of cereals and animals. In other words, the process of creating use-values and their very process of coming into existence come before than the monetary value of what came into existence. Moreover, the process of production (or of creation of use-value) becomes diluted among other revenue and expense entries and disappears in the net revenue.

My assessment of these characteristics is related to tension between monetary and non-monetary aspects of the economy and relations of production in the imperial

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[145] BOA, *HH.d 617.* 17. See the original document in Figure A4.

[146] Being the plural of Arabic word "varide", "varidat" literally means revenues or income. See: *New Redhouse Turkish English Dictionary*, 1221.

[147] The word "hasıl" derives from Arabic root "husul" which means "coming into existence." And, the first meaning "hasılat" is produce or products. Its second meaning is revenue, returns or profit, proceeds. See: *New Redhouse Turkish English Dictionary*, 456. In the context of account keeping in the imperial landed estates, recording agrarian produce and new-born animals as the source of revenue may be parallel to the inner logic embedded in the word itself.

landed estates of Mihaliç. As shown in the second chapter, the format of accounting books is characterized by enlisting of monetary expenses on one side, and non-monetary distributions on the other side. Or, as shown in the third chapter, variety of sharecropping and labor organization among the estate management and other parties followed a combination of fully monetized and in-kind payment methods. What we have already seen in the revenue, produce, and net revenue calculations at the annual level reflects this tension at another dimension. The produce is something concrete and a use-value in the first instance such as cereals or animals but they bear an exchange value or price in the market which allows them to be converted into sources of revenue, even though they do not really enter into market exchange. To put it differently, the idea of exchange is there even exchange does not happen at a specific moment. Among these tensions, after detecting the potential represented by monetary value of inventory and the actual composed of monetary transactions, we arrive at a point where the operational calculations in the imperial landed estates are conducive for discussion of wealth and profit. If one may say that the wealth of the imperial landed estates includes everything presently kept in their inventory, in the light of points mentioned above, the profit is treated more as a function of wealth, neither simply the difference between aggregate revenue or expenses, nor wealth as a function of profit. It is yet another way of saying that the profit calculations in the accounting books need to first clarify what may be really meant by profit and how things (use-values) and their prices (exchange-values) are calculated in the Ottoman context.

4.1.2 Things and prices

Given the inseparability of monetary and natural economy and of monetary payments and payments in kind in the running of imperial landed estates of Mihaliç, the recording of use-values and exchange-values seems to be related to several things. First, the practice of recording a thing always with its monetary equivalent displays that exchange represents a potential of the thing to be converted into its monetary equivalent, even it is not really exchanged. In the accounting books that I studied, this method is frequently used during the calculations of tithe out of total agrarian produce. Since the tithe is taken from every crop adding-up to the total produce, it is always written with taxed weight of each produce and its monetary equivalent in the year of calculation. In this sense, tithe calculations bear the notion of market exchange or convertibility of use-values into exchange-values through exchange, even the state is the ultimate buyer or appropriator. Moreover, this type of duality is both observed (i) when the imperial landed estates in the guise of landowner collects the tithe or rent from direct producers or sharecroppers, and (ii) when the State Treasury demands the tithe from the imperial landed estates. Although it is very hard to be sure whether the final transactions after the tithe calculations are made in money or in kind, I believe that this way of calculating tithe or rent may not be necessarily unique to the imperial landed estates of Mihaliç. Also, given the vagueness in the final transactions as in the case of imperial landed estates, the issue of economic performance becomes very complicated and it would be over-simplistic to reduce the issue into only its monetary dimension. In other words, the variations and commonalities of different payment methods within the realm of relations of production in a certain locality deserve to be treated altogether.

Second, as discussed in the second chapter, the formation of prices in the regional Ottoman markets may be complementary to our understanding of the account-keeping in the imperial landed estates. In the light of primary sources, the imperial landed estates make purchases from three major local markets located in the districts of Mihaliç, İnegöl, and central district of Bursa. Each purchase of the estates is approved by the local administrative councils in the districts.[148] Mihaliç being the major district for the estates, İnegöl market enters into the picture during late spring and summer months, when the flocks are transferred to the summer pastures around the Keşişdağı Mountain. According to Mübahat Kütükoğlu's studies on the *narh* system across the empire, the formation and setting of prices seem to be a crucial aspect to be mentioned at this point. Having earlier roots in Islamic societies, *narh* in the Ottoman Empire simply refers to local surveys of artisans, bakeries, peasants etc. to monitor the supply and supposedly quality of market goods and control cost of production and rate of profit by setting prices.[149] Kütükoğlu states that the application of *narh* system would be varying according to (i) ordinary and extraordinary times (famines, wars, floods but also gluts, large supplies etc.), and (ii) commodity of interest (lamb, sheep, vegetables, cereals, milk etc.). On these parameters, surveys and setting of prices can be done daily, monthly, seasonal, and annual periods by definition.[150] Another price setting, or this time a combination of price setting and dictating, mechanism in the empire appears in the provision of Istanbul especially in wheat, flour, and bread markets. Salih Aynural's detailed study of cereal trade between Istanbul and provinces shows both the priority of Istanbul in

[148] See Figure A3 in the Appendix.

[149] Kütükoğlu, *Osmanlılarda Narh Müessesesi ve 1640 Tarihli Narh Defteri,* 4-6.

[150] Kütükoğlu, *Osmanlılarda Narh Müessesesi ve 1640 Tarihli Narh Defteri,* 8-11.

cereal purchases and variety of appropriation methods: such as (a) *mukayese* (assigning quotas to the predetermined ports and their inland hinterlands for production and appropriation of cereals)[151], (b) *miri mübayaa* (very low rate determined and paid by the state, which is often regarded as tax), and (c) *rayiç fiyat* (rate of prices above than *miri* prices but still lower than the market prices).[152] In the running of imperial landed estates of Mihaliç, the method of *rayiç fiyat* (prevailing price) defines the formation of prices in the nearby markets. Put it differently, the primary sources always mention prevailing prices of commodities. Moreover, because of the estates being a state enterprise, I think that such dual record keeping may be related to these institutionalized procedures of market exchange and appropriation relations in which the central state has an upper hand. Under conditions where the prices would be set and adjusted, it would not be that surprising to convert every tradeable commodity kept in the inventory as a source of revenue. In the absence of environment- or human-induced extremities, the predetermined rates of prices can be seen as another contributing factor that facilitates the coexistence of payments in money and in kind.

Although the *narh* system is often considered as a constituent of ideology of overseeing and overprotecting Ottoman state,[153] in Charles MacFarlane's travel accounts of Ottoman Bursa in the late 1840s, there is a rather controversial point worth of mentioning. It is seen that fixing rates of market exchange reveals unequal power relations among different actors. For example, MacFarlane observes that the governor (*vali*) of Bursa, Mustafa Nuri Paşa, fixes the melon prices in Bursa markets.

[151] Aynural, *İstanbul Değirmenleri ve Fırınları: Zahire Ticareti (1740-1840*), 5-7. For an earlier case study, Faroqhi, "İstanbul İaşesi ve Tekirdağ-Rodoscuk Limanı (16. – 17. Yüzyıllar)."

[152] Aynural, *İstanbul Değirmenleri ve Fırınları: Zahire Ticareti (1740-1840*), 12.
[153] Kütükoğlu, *Osmanlılarda Narh Müessesesi ve 1640 Tarihli Narh Defteri*, 7-8.

Coupled with low quality of roads and high costs of carriage from inlands to the district markets, setting prices is said to be keeping small peasants away from direct access to market exchange. It is likely to be because the cost of carriage would cause the production costs of small producers to be higher than the fixed market rates. MacFarlane implies that things would be better for small producers in a free market environment where different levels of prices reflect varying qualities of goods and allow small producers to have at least a motivation to bring their produce to the markets. More important than his pro-free market stance, MacFarlane also observes that "The poor farmers say that the [*narh*] system is intended solely for the benefit of the rich –for the special advantage of a dozen or so of wealthy Turkish families, who live up in Brusa with absurdly numerous households."[154] Quite opposite of the approaches considering the relevance of *narh* system in Ottoman state ideology, the matter of prices, which is often taken for granted as an automatically generated set of numbers immune to power relations in a society, is related to the distribution and concentration of sources of agrarian production in a very few hands. Not being the primary concern of this study, however, then one of the questions becomes how families or individuals with large lands can profit under the fixed prices. If the surveys for setting the *narh* in a certain locality would give priority to the production costs of large landowners and the *narh* system would assure a certain rate of profit for them, we see how many factors in a social metabolism comes into play. For example, supply of different crops in a certain economic geography is assured by large landowners, not for a political ideal but for profit, who seem to have close relations with the local state authorities. From labor organization to land use in these large holdings, what we see is that "factors" of production are unequally distributed

[154] MacFarlane, *Turkey and Its Destiny*, 152.

among classes. In other words, large landowners with a production capacity constituted by a combination of administrative backing, more "efficient" or "effective" labor organization, and maybe a different level of technology etc. would achieve lower prices in the markets. In the absence of access to these factors and difficulties in transportation, the issue of profit for small producers requires more careful assessment for obvious reasons and for not confining the issue only to the technology.

What I argue in the context of imperial landed estates of Mihaliç can be posed from several aspects. First of all, approaching the account-keeping as a labor process (i.e. production of records of economic performance) allows me to infuse more into the mentality behind the account-keeping. By doing that, there is a new dimension in which the monetary equivalent of inventory of the estates are considered as the ultimate source of revenue in annual profit calculations and reporting, which causes unrealistically boosting the profits against the sum of monetary expenses. In this sense, profit can be said to be a function of wealth and wealth is everything owned and kept by the estates in their storehouse -not marketed but can be marketed. Along with other tensions studied in the previous chapters, here we witness another tension between actual and potential, between profit and wealth. Second, despite being an example of single-entry account keeping, the accounting books of the imperial landed estates can be still concerned as a source for understanding relations of production in a social metabolism. In this sense, a variety of historical mechanisms of price setting and/or dictating in the Ottoman Empire such as the *narh* and appropriation methods in the provisioning of Istanbul, which were in effect within the period of study, may imply that the information of prices

reaches first to rich local powerholders before markets.[155] Moreover, since the estates of Mihaliç are state-enterprises and it is a diffused body of state institutions setting prices, the accounting books concerned in this study may rest on the similar comfort that nothing surprising happens with the prices, even something unexpected in the production does. Third, in addition to the dual record keeping in tithe collections stating weight and monetary equivalent of taxed produce, calculating monetary equivalent of non-marketed (i.e. unrealized sales of) goods may be considered as a strong indicator of emergent capitalist mode of production among other modes in a certain locality. In *Pre-Capitalist Economic Formations*, Karl Marx notes that one of the characteristics of capital is that it "unites the masses of hands and instruments which are already there."[156] Emphasizing the capital's capacity of unification together with points mentioned above, can we say that the accounting books of the estates is concerned more with the hands and instruments being unified and set in motion by the operations of the estates, rather than simply making monetary profit in a modern capitalist sense? Or, can we say that the deep-rooted modes of price setting in the Ottoman markets give a strong reason for calculating the monetary equivalent of inventory, which as a potential can be set in motion through market exchange in case? Acknowledging the difficulty of giving right answers to these complicated questions, I argue that the presence of such tensions, most notably the one between

[155] In the first volume of *Capital*, Karl Marx notes "Hence a thing can, formally speaking, have a price without having a value. The expression of price is in this case imaginary, like certain quantities in mathematics. On the other hand, the imaginary price-form may also conceal a real value-relation or one derived from it, as for instance the price of uncultivated land, which is without value because no human labour is objectified in it". Marx, *Capital,* 197. In the light of this quote, as implied before, the prices and formation of prices in the Ottoman markets can be approached a moment in the sphere of exchange and circulation of commodities, which cannot be thought independent of relations of production.

[156] Marx, *Pre-Capitalist Economic Formations*, 111-112. "Monetary wealth neither invented nor manufactured spinning wheel and loom. But once spinners and weavers had been separated from their land, they and their wheels and looms came under the sway of monetary wealth, etc. *Capital unites the masses of hands and instruments which are already there. This and only this is what characterizes it. It brings them together under its sway.*"

actual and potential, between what the estates keep and what they set and can set in motion, characterizes the mentality behind (or the mode of) account-keeping.

4.2 Land registers: Unity within multiplicity

In the light of questions asked right above, another point urging me to consider the tension between actual and potential, once more but at another level, concerns the absence of imperial landed estates of Mihaliç in the land and income (*temettuat*) registers of 1840 and 1845 in the empire. Though these registers could not cover the whole empire, within the scope my archival research, I noticed that the imperial landed estates of Mihaliç are not registered, only their names are enlisted in a single page,[157] even the nearby landed estates in the plain belonging to private individuals are registered in detail.[158] This absence may be a minor detail confirming that the surveys and registers are conducted to record and take an economic snapshot of the imperial subjects, and thereby there would be no need for the empire to register the landed estates belonging to its own use.

In the third chapter, while studying the spatial division of labor among individual landed estates within the complex of imperial landed estates, I benefited from the inspections and surveys done by military official Nesib Paşa in 1845-46. Probably coinciding with the second wave of *temettuat* registers of 1845, Nesib Paşa's survey displayed a detailed registration of total area of the estates under categories of field (*tarla*), plot (*kıta*), and pasture (*mera*). In this sense, the snapshot of the estates is separated from the land and income survey of Ottoman subjects at

[157] BOA, *ML.VRD.TMT 8929*.

[158] BOA, *ML.VRD.TMT 8927*.

the imperial level. Moreover, the relevance of Paşa's survey manifests itself not only through stating fields, plots, and pastures, but also through recording the borders of each field and plot within each landed estate.[159] In other words, in addition to aggregate size and distribution of the total area, these records enable me to come up with information regarding the distribution and concentration of plots by size and their borders in a very detailed manner (See Figure 5 and Figure 6 on page 118). Information on the borders is hard to be utilized in a systematic and visual manner because the border ranges take rivers, stones, nearby fields etc. as their reference point. However, I argue that the various sizes of plots and their categorization may be conducive for discussion for unity brought by the imperial landed estates as a state-enterprise and for our understanding of lands belonging to the dynasty.

Among the total plots occupied by the estates, nearly 70% of them are constituted by lands under 49 *dönüm*, between 50 and 90 *dönüm*, and ones between 100 and 149 *dönüm*. On the other hand, in area terms, these three categories summing up the majority of plots only correspond to 20% of total area of the estates. From another angle, the fields between 300 and 400 *dönüm* and ones higher than 500 *dönüm* constitute the majority of area even though they occupy only 16% of the plots. These imply that the fields relatively small in area terms are parceled out more than the higher ones, or, the fields relatively higher in area terms are concentrated in less parcels.

[159] See Table B3 for the transliterations of primary sources.

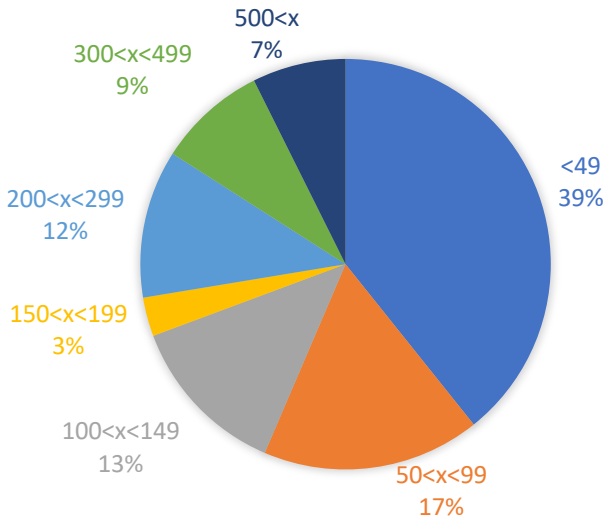


Figure 5 Distribution of plots[160]

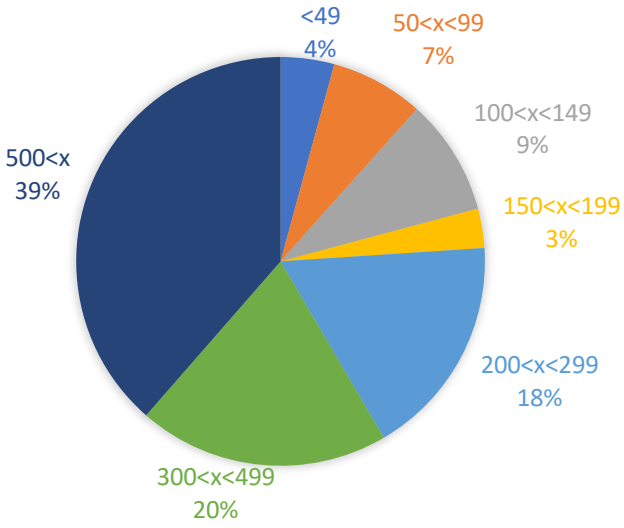


Figure 6 Distribution of cultivable area[161]

Beyond aggregate distribution and concentration of lands, this picture varies too much even at more micro level. Each individual estate differs from another in field, plot, and area terms.[162] As much as the relations of production, volume and variety of crops produced in each individual landed estate are not the same with each other, the concentration and distribution of fields and plots also vary from each other.

[160] See Table B4 in the Appendix as the source of the chart.

[161] See Table B4 in the Appendix as the source of the chart.
[162] See Figure A8 in the Appendix.

In the lack of archival material from earlier times that recorded these same estates with similar detail, it would be unfortunately incomplete to draw conclusions on what factors may have played a role in this pattern of distribution and concentration. Also, it would be unknown whether the establishment of the imperial landed estates marks a beginning of partitioning or merging of plots and fields in the plain. Or, whether the estates launch their production process at the plots and fields by leaving them untouched would be equally unclear, although it is clear that the early days of establishment coincided with massive repair activities in the plain. However, in the light of expressions and phrases used in specifying the border ranges, it is still possible to come up with several interpretations of the material. First, the plots are registered either to the names of people (usually plots with small areas), or some plots do not include the names of people, but rather appear as a description of location and surrounding fields (e.g. one plot of field in … surrounded by …). Second, in addition to these two types, there are several more explicit cases specifying the purpose of use such as plot of barley, vegetable garden (*sebze bağçesi*), dye to be produced out of flax seed (*keten tohumu*). Third, and more interestingly, there are several occasions in which the phrase of the service area of landed estates (*çiftlik-i mezbur hidmet yeri*) is used for some plots in the individual estates. In line with that, some plots are verbally located according to its position with respect to the service area, like the plot in front of the aforecited landed estate (*çiftlik-i mezbur önünde bir kıta tarla*) etc. Fourth, there also references to some accommodation units like gardener's room (*bağçevan odası*), which can be considered as modest clues regarding the division of labor within the complex of imperial landed estates of Mihaliç.

In the light of these points, I argue that the distribution and concentration of plots along with the descriptions used to record them give strong reasons for once more verifying the presence of multiple production processes in the imperial landed estates of Mihaliç. Or, the multiplicity of relations of production, which manifest itself through variety and volume of production in each individual estate and through changing labor organizations depending on the crop to be produced, is observable from the distribution of plots in the estates. In this sense, the physical space used by a state enterprise in the plain of Mihaliç is unequally distributed owing to unclear factors. Rather than assuming homogeneity in terms of the morphology of landscapes across the landed estates, such unequal distribution may be representative of a combination of land use and tenure and characteristics brought by micro geography. Moreover, it would not be wrong to note that such landscapes of the landed estates as micro geographies may have been shaped by a series of interventions well expressed by cultivation versus grazing, fields opened from woods, and fields in dried marshes, given the massive repair activities after frequent inundations in the plain of Mihaliç.

Also, although the imperial landed estates of Mihaliç are absent in the *temettuat* registers, the minute registration of land in each individual estate and the mode of account-keeping show that these estates are matter of different treatment at the imperial level. Such absence far more than implying an exception or abnormality, what we see is that the state enterprises are probably and expectedly the ones on which much attention is drawn. While positing the major tension in the accounting-books resting in between actual and potential, I asked whether the accounting-books display the unity of hands and instruments brought by capital invested to the estates. In a similar manner, the character of land registers in the estates can be augmented to the discussion of unity. As much as hands and instruments, the land of different uses,

sizes, and distributions appears as a unity under the management and operations of the landed estates. Or, the relations of production characterized by unequal power relations among many actors in the estates now can be projected on the unequal matrix in the physical space divided according to size, plot, and borders. Being conducive for further discussions on the scale, scope, and size of agrarian enterprises,[163] this very unity of land, labor, and instruments can be seen how capital brings many factors under its sway. Equally important to this observation, then the question of capital accumulation (as one of the crucial points of sustainability of production) pops up to be discussed to better engage with questions like who benefits from the running of the imperial landed estates of Mihaliç.

4.3 Direction(s) of capital accumulation

In the final section of this chapter, as much as the final stage of all production process taking place in the imperial landed estates of Mihaliç, the question of capital accumulation has utmost importance for tying the constituents of social metabolism

[163] Although it is not included in this study, the question of scale and size regarding economic performance of an agrarian enterprise in the nineteenth century Ottoman Empire appears as a very important point to be dealt with. For example, Orhan Kurmuş in his careful and mind-opening study, titled *Emperyalizmin Türkiye'ye Girişi*, directly addresses these issues. Quite interestingly, after the permission allowing non-Ottomans to buy landed properties in the mid 1860s, British entrepreneurs engage with agrarian production in the hinterland of Izmir. According to some French consular reports on the performance of British landed estates in Izmir, it is noted that when a landed estate is up to 2000 *dönüm*s in size, capitalist mode of production (i.e. strictly employing wage-laborers) characterices the dominant production relations. When it is higher than 2000 *dönüm*s, British entrepreneurs move towards sharecropping arrangements (*ortakçılık*, *yarıcılık*), and quite oftenly it ends up with losses for them. It is explained as follows. In relatively smaller lands the volume and unit cost of produce can be calculated according to the will of entrepreneur. However, in relatively larger lands, the volume and thereby unit cost of produce bccome a factor dependent on more actors entering into the scene through sharecropping. See: Kurmuş, *Emperyalizmin Türkiye'ye Girişi*, 112-119. Also from an empirical perspective, Şevket Pamuk also notes that during the *Tanzimat* era in the Ottoman Empire both "the expansion of trade and direct foreign investment" in the Eastern Mediterranean paved the way for emergening differences in among regions in "per capita income levels". Pamuk, "Estimating Economics Growth in the Middle East since 1820," 823.

to each other. This question is particularly important because it urges me to ask who benefits from the establishment and running of thee states at the end of day. Or, do the landed estates fulfill initial reasons for and motivations behind the establishment such as strengthening treasuries by being domestically self-sufficient on wool?

If one would only consider the final reports sent by the estate management to the center every year, the balance is expected to verify that the estates are profitable enterprises since the net revenue or profit (*varidat-ı asliye*) is always positive. Therefore, the estates seem to accomplish the task of strengthening of treasuries, or they are in the right track for covering initial costs after certain years since they profit. However, according to the findings presented in this chapter, the profit and revenue calculations are biased towards unrealistically boosting revenues against expenses. Due to this bias, it would be apparently wrong to claim that estates are profitable for the treasuries. Under such conditions, the real monetary balance of the enterprise turns out to be a very difficult riddle to be solved. From another angle, it is more likely to claim that the estates are at loss in monetary terms. Among these uncertainties and tensions, even it is highly likely that the estates are unprofitable enterprises, I argue that the relations of accumulation can be helpful for coming up with an answer to the question of who benefits from the operations of the estates, or at least for describing a general sketch of the accumulation pattern.

4.3.1 Intermediary figures or beneficiaries of (primitive) accumulation

Being mentioned earlier on, many non-Ottoman figures partook in the production process from agriculture to stockbreeding in the imperial landed estates of Mihaliç.

For instance, in the post of chief-shepherd (*çobanbaşı*), there had been several figures from Russia, Austria, and Prussia, who were hired for taking care of the health and order of imperial sheep in the plain. While these figures resembled a combination of veterinary expertise and managerial ability, some primary documents showed that the estates took some commodity-specific steps to import cotton seed with a master from the North America, in a similar manner. In addition to the direct inclusions of such figures into different stages of production process in the estates, there had been yet another group of Ottoman non-Muslims –most notably Ottoman Armenians (The Dadians)- who seems to be crucial for the relations of accumulation within and beyond the estates.

Among all non-Muslim figures, Barutçubaşı Höce Ohannes (which is often read as Evans or Avanes in the primary documents) is the most repeated and notable one among other names. Höce Ohannes is likely to be one of the prominent names within the period of study because beyond his roles in the landed estates, he is directly appointed by the center to improve the conditions in state-owned gunpowder factory in Istanbul, as his title suggests.[164] Within the process of wool production in the estates, Höce Ohannes enters into the picture in two major moments. First, the contract of last chief-shepherd of Austrian Matej is signed right after Ohannes finds and suggests him to the estates. But more importantly, when it is time to transfer wool from Mihaliç to the İzmit Factory, Ohannes becomes chiefly responsible for it every year. The quantity of wool produced at that time is calculated in weight and monetary value, and then it is recorded and considered as Ohannes's personal debt or liability (*zimmet*) to the estates until the delivery of wool to İzmit. For the running of the estates, it is conceivable that the wool in motion is the primary asset and

[164] As Edward C. Clark notes, the Gregorian Armenians were among the leading figures not only in Ottoman bureaucracy, but in banking and industry. Clark, "The Ottoman Industrial Revolution," 70.

considering it as liability until the destination makes sense. Moreover, it can be seen yet a method of insuring the wool as the primary commodity. In cases of damage, theft, or something else, the estates at least may want to secure the monetary equivalent of the commodity, where it is no longer possible to talk about wool as an operational use-value (input of productive consumption process) for the factories.

Beyond the web of this commodity-insurance relations between the estates and Höce Ohannes, Charles MacFarlane's travel account once more reveals some interesting details about Ottoman Bursa. Along with Ohannes's close relations with the central state especially in importing military and industrial technology and knowledge mostly from Western Europe, he holds "a considerable number of acres of most excellent land at that [western] end of the [İznik] lake" nearby Gemlik in the Gulf of Mudanya. Moreover, MacFarlane also states that Ohannes's holdings were examined by "a competent English man" and it is reported that a short river is canalized within his holdings and it facilitated "water communication and … conveyance of produce" among the Gulf of Mudanya, Marmara Sea, and İstanbul.[165] Given certain degree of uncertainty regarding the labor organization and technology Ohannes has in his holdings, this point may prove that he is wealthy enough to undertake costly land and drainage improvement activities, and he may be in direct connection with the Ottoman markets. Moreover, MacFarlane talks about "an immense building" very close to the district center of Bursa and on the skirts of Keşişdağı (Uludağ), which is a silk manufacturing facility with a capacity of 150 workers. And, this facility is said to be jointly owned by "Dooz Oglous (Dadians?) and their Catholic-Armenian associates". The silk produced here is "superior in quality to the old Brusa's", and it is sent to another state-owned factory in Hereke (in

[165] MacFarlane, *Turkey and Its Destiny*, 360.

the Gulf of İzmit) processing silk and producing its fabric.[166] Since Höce Ohannes is a leading figure in the Catholic-Armenian family known as the Dadians in the Ottoman Empire, both his personal land holdings and his or his extended family's direct inclusion with silk production and its trade with the state reveal the scope of activities established with the markets and the state. It is another way of saying that Ohannes is not an ordinary figure for the running of imperial landed estates of Mihaliç, rather he has very strong relations with the rest of the region.

In the light of the method of recording wool as liability (*zimmet*) in the accounting-books together with the complicated relations between the state and the wealthy Armenians of the time, I argue that the relations of accumulation may rest on the network of debt in three steps.[167] First, earlier in the second chapter, I argued that financial transitions among local and center state institutions according the diagram of expected cash flow (See Figure A7) are done through payment orders, not transfer of tangible money for each transaction. From another angle, it means that state institutions –especially the ones having autonomous budgets– are indebted to each other on paper. If this format of debt would be limited only to the settling accounts of the state institutions at the end of each accounting period, then it would be possible to analyze both the volume and final status of these transactions, only as the distribution of funds among institutions. Second, however, as the case of wool production in the estates and its transfer to the factories suggest, both the state and private figures can owe to each other. Ohannes's example clearly shows that the logistics of transferring one commodity to another place is an emerging debt relation

[166] MacFarlane, *Turkey and Its Destiny*, 142.

[167] It is also interesting that pretty much the decade of 1840-1850 coincides with the new measures like issuing the paper banknotes (*kaime*) in the empire. See Eldem, "Ottoman Financial Integration with Europe: Foreign Loans, the Ottoman Bank and the Ottoman Public Debt," 431-434, Regarding similarities of *kaime* with earlier financial instruments: Akyıldız, *Para Pul Oldu: Osmanlı'da Kağıt Para, Maliye ve Toplum*, 35-58. Regarding how the banknotes are originally expanded over public debt: Lapavitsas, *Profiting Without Producing: How Finance Exploits Us All*, 159-160.

until its delivery. Apart from Ohannes, for instance, in the summary and certificate books of the estates, it is seen that Tokadlı Oğlu Höce Agob is assigned to the role of transferring a sum of money belonging to the imperial factories to the State Treasury (*Maliye Hazinesi*). But he does not deliver it, and then the treasury informs Agob's brother and business partner Höce Tomas in Istanbul to pay the debt. The documents only permit me to see that Agob does not deliver the money, because the Treasury owes him some from previous transactions and assignments.[168] Third, regarding the wool business in the empire, a small detail from the secret surveillance reports from 1840-1844 collected and published by Cengiz Kırlı in *Sultan ve Kamuoyu* helps me understanding the nature of cooperation between the state and private figures. For example, as early as December 1842, one of the reports states that a non-Muslim called İslimyeli Todiri tells a story about two waves of purchases of Spanish merino sheep for the factories in the empire. We learn that Todiri is one the figures who mediate the purchase and transfer of merino sheep for imperial factories around İslimye (Silvan) each costing 125 *guruş*. According to Todiri, quite interestingly, Barutçubaşı Ohannes and a merchant trading with Russia purchase the same sheep for *Feshane* for each costing 250 *guruş*.[169]

To sum up, in the light of these three moments of debt relations among the state and private individuals, there can be several directions of capital accumulation to be specified. First, the practice of *zimmet* represents a rather later stage in the production process because the sheep are bought, brought, grazed, and wool is

[168] BOA *HH.d 72*, 114.

[169] Kırlı, *Sultan ve Kamuoyu: Osmanlı Modernleşme Sürecinde Havadis Jurnalleri (1840-1850)*, 383. The entry numbered 1027: "Balkapanı'nda Çukacıbaşı İslimyeli Todiri zımminin nakli "barutçıbaşının ma'rifetiyle Rusya tüccarlarından Zuhuraki Dersaadet'de i'mal olunan fes içün İspanya koyunlarından çiftli beşbin beş yüz guruşa bin çift koyun mübayaa olunacak olduğunu barutçubaşı mersumdan işitdim. Ben İslimye Fabrika Nazırı Mustafa Bey içün ağnam-ı mezkurenin çiftini yüzaltmış guruşa mübayaa ettim, Feshane içün dahi çiftini ikiyüz elli guruşa getürdürüm" deyü işidilmiş olduğu" Original location in the archives: *BOA* İ.DH, 3509.

obtained from them. The relation of debt in this scenario is tied strongly to the exchange value of the commodity, and it can be seen as a way of insuring the commodity from the state perspective. As Höce Agob's controversy with the State Treasury suggests, "mediatory figures" may take initiatives and prefer not delivering the commodity or money to the destination by claiming that the Treasury owes him. In this scenario of unpaid debts among the parties, there may be an accumulation potential for private individuals by not fulfilling the duties assigned and expected by the state. Second, rather speculatively, Höce Ohannes may have not applied to the measures taken by Agob against the Treasury. In the lack of such an explicit controversy, there would be several ways which Ohannes can benefit from the running of the estates: (i) as Todiri's statement suggests, Ohannes and his mediatory merchants may have been paid for each sheep bought on behalf of the estates, and this can be a reason for why the same sheep bought by him is more expensive than Todiri's; (ii) Ohannes may have received the return of his services as granting him land around the Lake of İznik, and he may accumulate either through renting the land or engaging with production more directly by investing some capital; (iii) Ohannes may have been paid monthly or annually by the state; and (iv) there may be different combinations of the previous ones. Fourth, beyond these intense relations among state private individuals, the establishment of the estates does not and cannot mark the beginning of capital accumulation in the empire. In this sense, we can also consider the price setting and dictating mechanisms in the imperial markets as contributing factors to the long-lasting waves of primitive accumulation. It is because these factors may (i) keep independent small producers away from direct market exchange; (ii) stimulate varying waves of proletarinization of peasantry through

pauperization; (iii) create and/or increase a crisis of indebtedness for small producers, etc.[170]

4.4 Questions more than answers

In this chapter, I engaged with several discussions slightly mentioned in the previous chapters, but dealt with more in detail. In the very beginning, I approached the imperial landed estates of Mihaliç as a social metabolism (*Stoffwechsel*) in order to emphasize the interconnectedness and interdependency of human activities to each other at a certain time and place. While the concept of social metabolism having its roots in historical materialism, most notably of Karl Marx's writings, it has been recently employed for underlining the ecological degradation brought by capitalism, as Foster and Moore's studies suggest respectively. Since the imperial landed estates of Mihaliç are agrarian enterprises, which imply that their operations resemble an organizational way of shaping and being shaped by the nature, they offer a chance to organically employ the concept of metabolism. Furthermore, I benefited from the concept by expanding its usage, not by disengaging its original insight, to argue that the act of account keeping is noteworthy because of being a labor process and being an outcome of certain mentality. Such approach, then, enabled me to problematize

[170] Regarding the broader effects of indebtedness of small peasantry in Mihaliç and Kirmasti districts, Atilla Aytekin mentions the scope of "collective debt obligations" by analyzing the debt registers (*borç defteri*) from late 1830s. Along with emphasizing various forms and methods behind debt accumulation, Aytekin also underlines that "spatial relationship of indebtedness communities" stretched from a single village to İstanbul. Aytekin, "Cultivators, Creditors and the State: Rural Indebtedness in the Nineteenth Century Ottoman Empire," 297-300. Although I did not come up with direct evidence implicating that Höce Ohannes directly extends credits to small cultivators in Mihaliç and Kirmasti districts, it is more likely to claim that he may have been taking advantage of consequences of this widespread indebtedness such as dispossession and displacement of poor, given his economic influence and holdings in the region.

the sources and treat the account keeping both in relation and relative isolation from the production process taking place in the estates.

During my analysis of the mentality behind the revenue, profit, and expense calculations at the annual level, I came up with several interesting details. For example, the accounting books perceived the monetary value of the inventory as their ultimate revenue in profit calculations, which caused problems like boosting the revenues against the expenses. As a vector of treating the inventory as the ultimate source of revenue, I observed the sales or purchases in the books are recorded either as positive or negative units depending on the logic whether they increase or decrease the volume of inventory. These calculations unfolded another tension between actual and potential, and profit and wealth. I argued that profit is considered as a function of wealth, not vice versa. By benefiting from Marx's discussion of how capital unites masses of instruments and laborers under its banner, I elaborated more on actual versus potential by stating that the book-keeping in this case is characterized by what the estates keep and what they set or can set into motion for their operations.

Yet at another level, I discussed the *narh* system in local markets and appropriation methods mostly used in the provisioning of Istanbul as two important moments to understand what other historically-specific implementations of price formation in the Ottoman markets may have affected the character of account-keeping. Rather than seeing prices outside the realm of power relations, these two implementations, quite the opposite, revealed how the state enterprises and local rich may benefit from price setting, while the small producers may not. In the context of account keeping, from tax and rent to profit calculations, I argued that the imperial landed estates of Mihaliç because of being a state-enterprise may rest on the comfort

of price setting, even something unexpected happens in the production process. In other words, historical methods of price setting coupled with the relations of production, may emphasize the deep-rooted practices that would encourage, or at least facilitate, the dual calculations of monetary and non-monetary value of potential originally kept in the estates' inventory.

Once more following the discussion of unity of or within multiplicity in the imperial landed estates of Mihaliç, I revisited the land surveys and registers completed in the very early days of their establishment by military official Nesib Paşa. Together with the absence of the estates in the state-implemented incomplete *temettuat* registers across the empire, I argued that the state enterprises are expected to be treated differently than the imperial subjects. Moreover, by presenting data on the distribution and concentration of fields and plots of each individual landed estate within the complex according to their size and number, I argued that the plots smaller in size are parceled out considerably more than the ones larger in size. Since the issues with prices added another dimension to the unequal power relations, the varieties in land distribution and concentration at the level of individual estates can be seen as a projection the same power relations visible in the physical space. Moreover, in a similar manner with the unity of instruments and people in the discussion of tension between actual and potential, I argued that land of heterogeneous sizes and plots can or should be seen as one of the major constituent of such unity.

Last but not least, as the final stage in the social metabolism of the imperial landed estates of Mihaliç, I approached the question and relations of accumulation to understand who would benefit from the running of the estates at the end of the day. Due to the characteristics of account-keeping, I argued that the issue of profitability

in monetary terms for the estates is problematic in the sense that it is hard to gauge the volume of loss or gain for the estates. Therefore, I approached the sources of accumulation through the network of indebtedness among state and private figures both to understand the scope and direction(s) of capital accumulation in the imperial estates. For the operations of the estates the Catholic-Armenian Dadian family, and its most notable member Barutçubaşı Höce Ohannes, is observed to be busy with many other economic activities both with and outside the state. Moreover, by introducing further figures, relations, and cases, I depicted a bulk of accumulation potentials within and outside of the estates.

In the light of all major findings and discussions elaborated throughout this chapter, my analyses at multiple layers and scales end up with more complex questions to be explored and studied elsewhere. For example, the findings regarding the characteristics of account-keeping may require an extensive survey and comparison of the accounting books of other state enterprises established before and after the imperial landed estates of Mihaliç. It is because if the major tendency in the account-keeping in the empire is biased towards exaggerating the monetary value of non-monetary potentials, then it would imply that all financial indicators for treasuries are wrong in the sense that representing the potential of the empire, not its actual. Equally important, the network of debt moderately mentioned in this chapter can be examined more in detail covering the earlier and later periods, but also other state and private enterprises in the empire. I think, these points are crucial to see and detect more possibilities and concrete relations of accumulation between the state and individuals to engage with a discussion of whether we see either or both of state capitalism and/or private capitalism in the Ottoman Empire.

CHAPTER 5

FINDINGS AND CONCLUSION

This thesis dealt with the establishment and running of imperial landed estates of Mihaliç roughly between 1840 and 1850. Owing to the examination of relatively short period of time, it can be regarded as a micro study on the Ottoman state enterprises in the mid-nineteenth century. Notably different than the works covering larger periods of time in the discipline of history, a study of decade allowed me to diffuse more to the archival material or it necessitated to do so. Yet, this study is no exception to the very fact that every academic production asks questions to its material, employs or rests on some methodology to search for answers, and presents all in organization. In simplest terms, I aimed at approaching an agrarian activity at a micro scale through asking questions inspired by rather macro concepts like how institutions, economy, and environment come into play and constitute a social metabolism. A reason for this preference stems from the nature of questions I asked in the very beginning. Since there would be no doubt that an agrarian enterprise is still a process of production, I began my research by asking who partakes in the production, what they produce, what happens to the produce in distributional terms, and who benefits at the end of the day. Despite the primary concerns of body chapters variate from each other, these questions are always there usually in altered or modified forms. Respectively, each body chapter is characterized by slight changes in the analytical magnitude of institutions, economy and environment. It is a rather conscious choice to include and complement different facets of production process and have a holistic understanding at the end. However, this research does not have a single conclusion in a nutshell but a series of findings and conclusions

hopefully conducive for further studies. In what follows, I present them according to the order of chapters.

In the second chapter, I dealt mostly with the earliest phase of the establishment of imperial landed estates of Mihaliç to understand what takes for an agrarian state enterprise to be established in a certain locality relatively distant from the imperial center. In this sense, my findings suggest that the preparations began around 1843 with the abolishment of former tax-farming contract registered as *Çobankırı mukataası* to its tax-farmer Ahmed Şaban Efendi. Furthermore, I noted that the land on which the estates are established and previously tax-farmed directly belongs to the use of dynasty (*havass-ı hümâyûn*). In other words, the land in question has a rather distinct past in the history of Ottoman Empire. Loosely employing the concept of "enclosure," I dubiously approached whether the establishment of the imperial landed estates in the early 1840s means an "enclosure" from the scratch or a series of "enclosures" first wave of which dates back to the sixteenth century.

Moreover, due to the fact that the estates along with the imperial factories are categorized as state enterprises, I presented a broader network of state institutions partaking in coordination of economic activities distant from the imperial center by benefiting mostly from expected cash flows among local and central state institutions. In this network of state institutions, which can be also named as bureaucratic division of labor, I noticed the important role played by the district level divisions of Fiscal Treasury (*kaza mal sandıkları*) in terms of financial sustenance of the estates. In the absence of private or state agricultural banks giving loans to peasants at a regional level, I argued that these local divisions occupy a central role for assuring purchasing power for an enterprise far from the center still in a monitorable manner. However,

along with this monetary aspect useful for depicting broader institutional network, I argued that the economic performance of and relations in the estates cannot and should not be confined to this monetary aspect. It is partly because the format of accounting books suggests that non-monetary sphere stands hand in hand with the monetary one. Also, by using examples from the accounting books, I argued how the monetary wage calculations can be misleading or inaccurate to come up with definite conclusions. In other words, I stressed the inseparability of monetary and non-monetary aspects in the running of the estates, and thereby expanded the issue of economic performance towards the relations of production in a historical materialist sense.

After examining the institutional events and networks coinciding with the establishment of the estates, I argued that the earliest phases of establishment are also important due to the presence of massive repair and reconstruction activities taking place in the region. These activities displaying the scope of challenges brought by the physical environment, I paid more attention on the composition of direct laborers in the estates. Along with the accounting books, a broader archival research enabled me to detect several methods employed by the central state and estate management to intervene ongoing regional dynamics and thereby assure the laboring hands in this regard. Given the relevance of stockbreeding and production of wool out of merino sheep, the estates had recruited employees from Ottoman Filibe (Plovdiv) in annual basis. Also, the central state took several steps to sedantarize nomadic tribes in the region as a new labor source. Moreover, even quite before the Crimean War, there had been several waves of settlement of Crimean immigrants under the permission of the state, again noticeably close to the imperial landed estates of Mihaliç. In other words, in the second chapter, I presented and discussed the establishment of the

landed estates through examination of institutional events and networks, sources and methods of labor supply, and challenges laid out by environment.

In the third chapter, however, I gave more voice to the physical conditions of the plain to situate the production processes taking place in the landed estates in a larger environmental framework. I argued that the plain of Mihaliç is a region in the Eastern Mediterranean basin characterized by a rich river network and not immune to the long-term climatic cycles brought by the Little Ice Age. Moreover, in geographical terms, I discussed that the plain should be seen a separate unit of analysis despite it rests quite close to the city of Bursa. It was partly because the river navigation facilitated the plain's access to the Sea of Marmara, lessened the dependency to Bursa and offered a cheaper alternative in terms of transportation. Also, the variety of crops produced in the plain differed from iconic ones (e.g. silk) in Bursa. Moreover, I noted that despite the plain is very spacious in area terms and seemingly fertile for production, the increased fluvial activity and accompanying pestiferous conditions may have played a role which should not be belittled for understanding of relations and processes of production in the region and the estates.

Right after sketching general environmental characteristics of the region and plain, I examined the agrarian production and stockbreeding separately to better articulate production relations and spatial division of labor within the estates. In the realm of agriculture, I employed the production data with the land registers of individual estates to assess whether there is a homogeneous picture across all estates or not. Then, I came up with a finding that mostly depending on crop type, there had been corresponding land regimes, labor organization, and payment methods (either money or in kind). In this sense, from the perspective of economic performance of the estates, I challenged the issue of monetary profitability by reminding and

discussing how the monetary cost and the logistics of production of a crop should be considered to challenge what one understands from profitability. Moreover, I treated this very presence of multiple production processes under the institutional umbrella of imperial landed estates as a unity, not scattered and disconnected processes from each other.

Following the minute examination of agrarian production, I focused on the stockbreeding within this very physical environment. Since the project of wool production is designed first by being capable of breeding merino sheep in the estates, the health and grazing of flocks seemed the most important. Through the correspondences between the estate management and responsible central bodies, I argued that the quantity and quality of summer pastures was the first challenge to overcome. Contrary the contemporary examples in Europe like increasing the nutritional efficiency through meadows, the central state usually sought urgent and quick solutions best expressed by regular expansions. It was an expansion at the expense of displacement of Turkmans living in high altitudes and overexploitation of natural resources through overgrazing. The same physical conditions which created an impulse for overgrazing were also harmful to the health of animals. By examining materials used to heal animals, I noticed that especially imported merino sheep were open to fungal and bacterial diseases brought by pestiferous conditions. Respectively, one of the constant issues for the estate management had been always finding an expertise who would come up with an ultimate solution.

More interestingly, however, from the perspective of entrepreneurial strategy, I questioned why the central state and estate management would have not examined the risks under these physical conditions before spending purses of gold on sheep. This particular point, one the one hand, allowed me to question geographical and

scientific awareness of the central state, and on the other, it clearly showed how the central state had incommensurate power and resources to make and learn by its mistakes. Equally important, for merino breeding to be successful, I also discussed the geographical and strategical reach of breeding activities in the estates of Mihaliç with other venues and imperial landed estates in the Balkans. Along with the experimental nature of stockbreeding for the estates of Mihaliç, I also argued that these imperial venues can be seen as natural laboratories because there were several attempts to produce silk and cotton either directly by buying seeds and hiring masters from the U.S (cotton) or translating and disseminating techniques via a series of translations of manuals written in European languages (silk). All in all, I concluded the third chapter by arguing that all these interactions among the physical environment, humans and extra-humans as a complex and combined processes should be seen as an environment-making process. In other words, despite given challenges and obstacles laid out by the physical environment, all decisions made by the central state and estate management meant a mode of putting nature and labor in work in certain direction and for certain end. The environment produced by a series of events, decisions, displacements, requirements etc., therefore, was not immune to the unequal power relations.

In the fourth and final body chapter, I offered a historical materialist framework to consider the institutions, economy, and environment examined through the imperial landed estates of Mihaliç as constituents of a larger social metabolism in the Ottoman Empire. Being interdependent to each other, I discussed that the constituents of social metabolism should be voiced altogether to have a holistic understanding at the end. At this point, I problematized the episteme of archival material since the scale, scope and description of metabolism reach first through the

act of recording or book-keeping. In other words, the account-keeping itself should be considered as a separate labor-process that produces records of economic activities in a certain order and as an outcome of a certain mentality.

By giving relative autonomy to the book-keeping, then, I re-examined monetary figures on revenue, expense, and net revenue (or profit) of the estates. Given unique ways of revenue calculations at annual level including all exchangeable items kept in the inventory despite they are not subject to market exchange, it simply meant boosting revenues against expenses. In other words, the final reports sent by the estate management to the responsible central bodies (most notably treasuries) carried information not on the actual monetary profit, but on potential wealth. At this point, I came up with an idea that this way of recording suggests that profit considered as a function of wealth and not vice versa. And, more in a political economic sense, I implied that the tension between use-value and exchange-value of commodities is represented yet at another level, between actual and potential.

Furthermore, I briefly mentioned institutionalized ways of price setting and/or dictating in the Ottoman Empire by discussing *narh* system and methods of appropriation in provisioning of Istanbul. Contrary to the previous works emphasized the role of these methods as constituents of "overseeing" Ottoman state ideology, I put down that the process of price setting and markets as venues of exchange are not equally accessible to all actors. Instead, by benefiting from Charles MacFarlane's travel account, the local rich and notables had serious power and tools to take an advantage of the way markets work in the Ottoman context. Moreover, I also stressed that the formation of prices in Ottoman markets may provide incomparable comfort for a body powerful actors to take prices of non-marketed commodities as if

they are already marketed. In other words, the institutionalized ways of price formation and market exchange in the Ottoman Empire made the sphere of exchange less surprising and more predictable (i.e. more manipulable) for the powerful actors.

Aligning my findings and discussions around the unequal power relations among social and economic actors, again in a historical materialist stance, I mentioned Karl Marx's views on how capital unites masses of hands and instruments under its sway. This point allowed me to reinterpret the recording of non-marketed commodities, which bear operational use-values at the same time, in the context of unification. Together with examining the distribution of plots according to their number, size and concentration for each individual landed estate within the complex of imperial landed estates of Mihaliç, I added that land of heterogeneous distribution, size, and concentration can and should be articulated into the discussion of unification under the sway of capital becoming more observable and tangible through the operations of the imperial landed estates of Mihaliç.

After all, I finalized my arguments by laying down directions of capital accumulation by looking at various moments in the running of estates. Displaying very important roles played by a Catholic-Armenian family, the Dadians, within and beyond the imperial landed estates of Mihaliç, seemed the ones most likely to benefit through accumulation. It was partly because they had also their own private facilities, entrepreneurial activities, and investments in the same province apart from their engagement with the central state. Moreover, in addition to the Dadians, I also stressed a broader network of merchants and mediators who worked together with the central state in different occasions. Combining all of these, I discussed the relations of debt also represented a serious accumulation potential and further posited

that this particular point is conducive to discuss capitalism in the Ottoman Empire alongside other historical forms of capitalism.

APPENDIX A.

PRIMARY DOCUMENTS AND TRANSLITERATION



Figure A1 A historical map of the plain of Mihaliç

Source: BOA, HRT 1221 (undated)

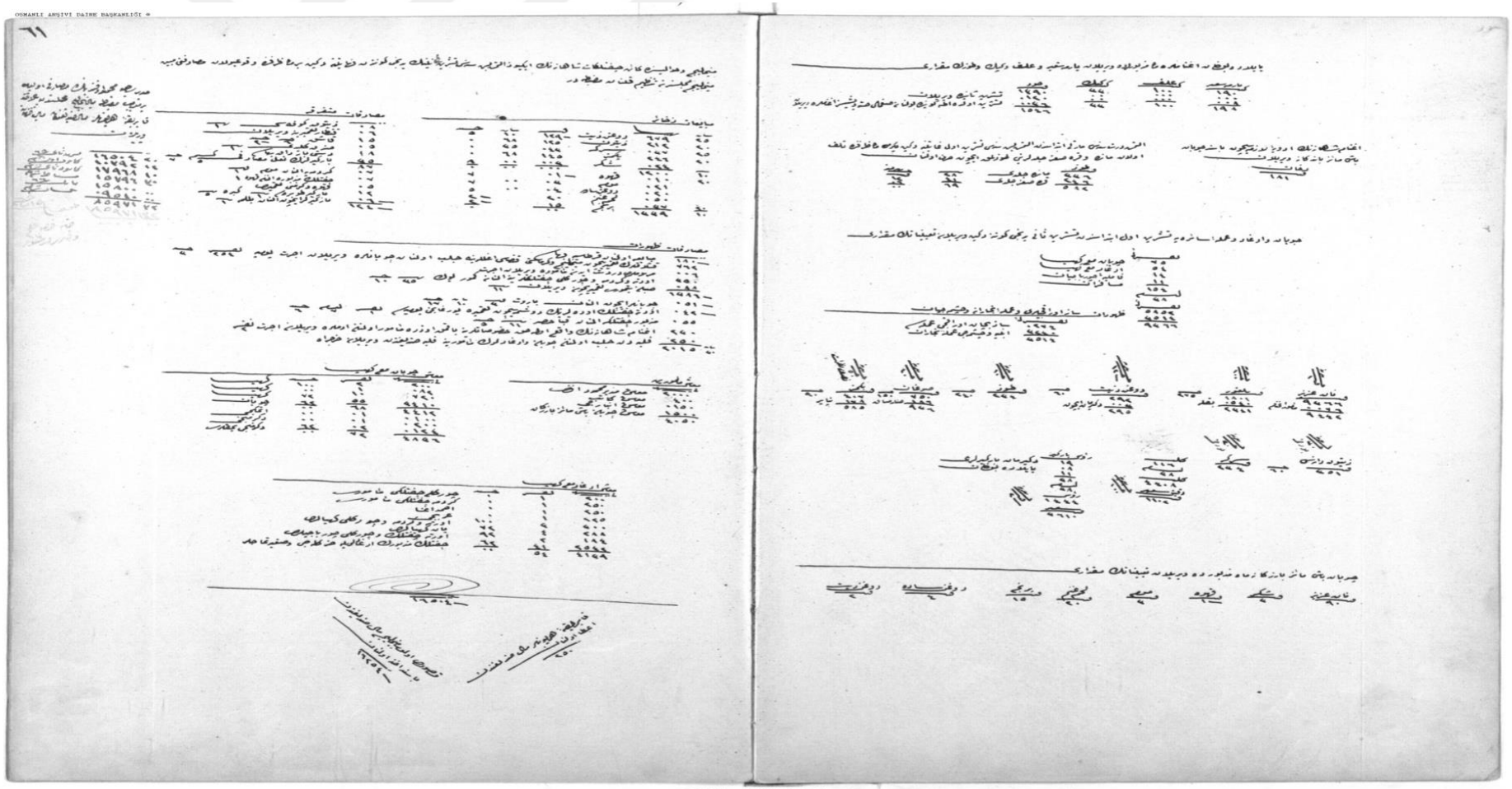
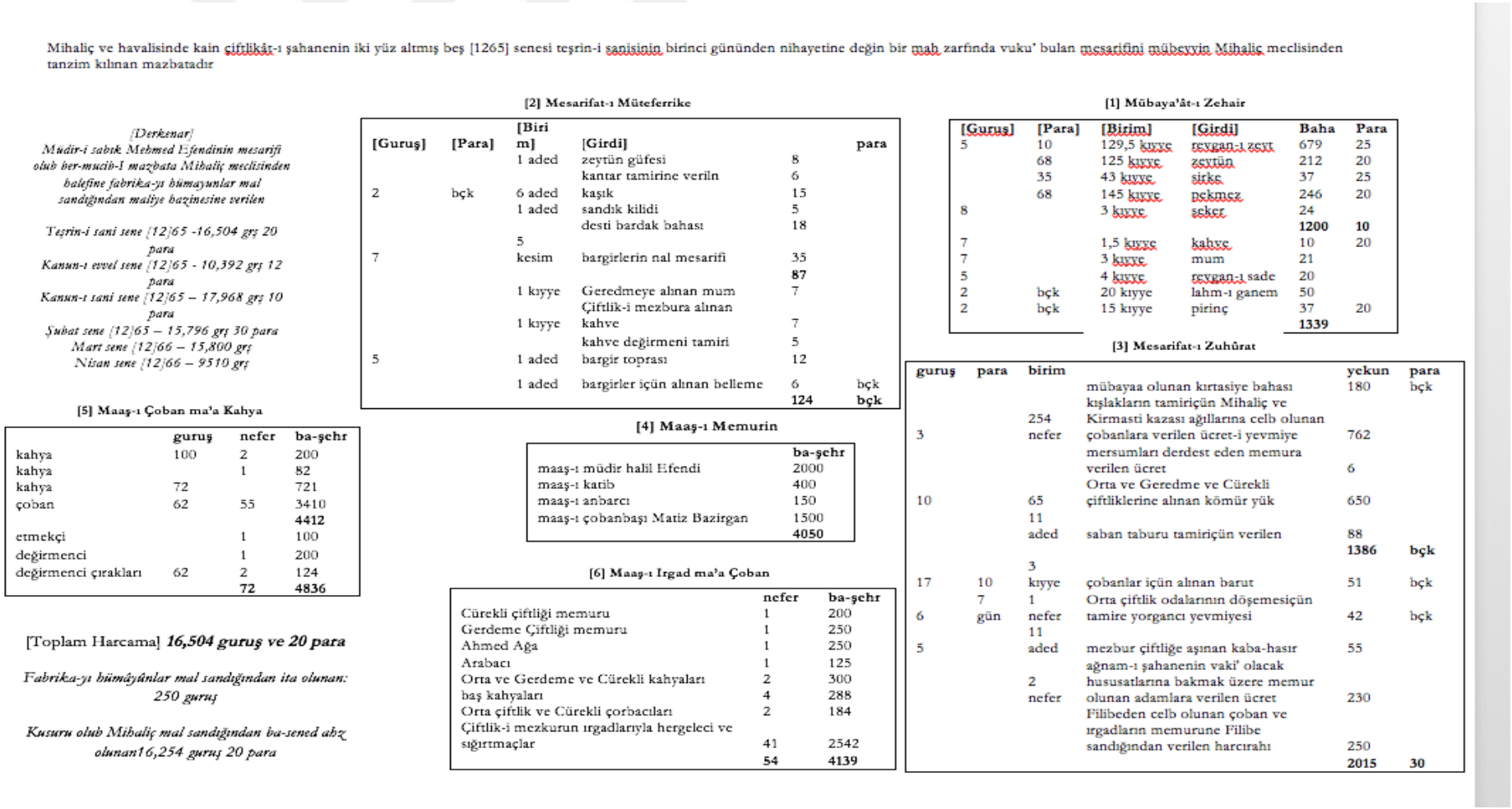


Figure A2 Sample monthly record
Source: BOA.*HH.d 617*, 61 (on the left of the page).



Mihaliç ve havalisinde kain çiftlikât-ı şahanenin iki yüz altmış beş [1265] senesi teşrin-i sanisinin birinci gününden nihayetine değin bir mah zarfında vuku' bulan mesarifini mübeyyin Mihaliç meclisinden tanzim kılınan mazbatadır

[Derkenar]
Müdir-i sabık Mehmed Efendinin mesarifi olub ber-mucib-I mazbata Mihaliç meclisinden halefine fabrika-yı hümayunlar mal sandığından maliye hazinesine verilen

Teşrin-i sani sene [12]65 -16,504 grş 20 para
Kanun-ı evvel sene [12]65 - 10,392 grş 12 para
Kanun-ı sani sene [12]65 – 17,968 grş 10 para
Şubat sene [12]65 – 15,796 grş 30 para
Mart sene [12]66 – 15,800 grş
Nisan sene [12]66 – 9510 grş

[5] Maaş-ı Çoban ma'a Kahya

	guruş	nefer	ba-şehr
kahya	100	2	200
kahya		1	82
kahya	72		721
çoban	62	55	3410
			4412
etmekçi		1	100
değirmenci		1	200
değirmenci çırakları	62	2	124
		72	**4836**

[Toplam Harcama] ***16,504 guruş ve 20 para***

Fabrika-yı hümâyûnlar mal sandığından ita olunan: 250 guruş

Kusuru olub Mihaliç mal sandığından ba-sened ahz olunan16,254 guruş 20 para

[2] Mesarifat-ı Müteferrike

[Guruş]	[Para]	[Birim]	[Girdi]		para
		1 aded	zeytün güfesi	8	
			kantar tamirine veriln	6	
2	bçk	6 aded	kaşık	15	
		1 aded	sandık kilidi	5	
			desti bardak bahası	18	
		5			
7		kesim	bargirlerin nal mesarifi	35	
				87	
		1 kıyye	Geredmeye alınan mum	7	
			Çiftlik-i mezbura alınan		
		1 kıyye	kahve	7	
			kahve değirmeni tamiri	5	
5		1 aded	bargir toprası	12	
		1 aded	bargirler için alınan belleme	6	bçk
				124	**bçk**

[4] Maaş-ı Memurin

	ba-şehr
maaş-ı müdir halil Efendi	2000
maaş-ı katib	400
maaş-ı anbarcı	150
maaş-ı çobanbaşı Matiz Bazirgan	1500
	4050

[6] Maaş-ı Irgad ma'a Çoban

	nefer	ba-şehr
Cürekli çiftliği memuru	1	200
Gerdeme Çiftliği memuru	1	250
Ahmed Ağa	1	250
Arabacı	1	125
Orta ve Gerdeme ve Cürekli kahyaları	2	300
baş kahyaları	4	288
Orta çiftlik ve Cürekli çorbacıları	2	184
Çiftlik-i mezkurun ırgadlarıyla hergeleci ve sığırtmaçlar	41	2542
	54	**4139**

[1] Mübaya'ât-ı Zehair

[Guruş]	[Para]	[Birim]	[Girdi]	Baha	Para
5	10	129,5 kıyye	revgan-ı zeyt	679	25
	68	125 kıyye	zeytün	212	20
	35	43 kıyye	sirke	37	25
	68	145 kıyye	pekmez	246	20
8		3 kıyye	şeker	24	
				1200	**10**
7		1,5 kıyye	kahve	10	20
7		3 kıyye	mum	21	
5		4 kıyye	revgan-ı sade	20	
2	bçk	20 kıyye	lahm-ı ganem	50	
2	bçk	15 kıyye	pirinç	37	20
				1339	

[3] Mesarifat-ı Zuhûrat

guruş	para	birim		yekun	para
			mübayaa olunan kırtasiye bahası	180	bçk
			kışlakların tamiriçün Mihaliç ve		
		254	Kirmasti kazası ağıllarına celb olunan		
3		nefer	çobanlara verilen ücret-i yevmiye	762	
			mersumları derdest eden memura		
			verilen ücret	6	
			Orta ve Geredme ve Cürekli		
10		65	çiftliklerine alınan kömür yük	650	
		11			
		aded	saban taburu tamiriçün verilen	88	
				1386	**bçk**
		3			
17	10	kıyye	çobanlar için alınan barut	51	bçk
	7	1	Orta çiftlik odalarının döşemesiçün		
6	gün	nefer	tamire yorgancı yevmiyesi	42	bçk
		11			
5		aded	mezbur çiftliğe aşınan kaba-hasır	55	
			ağnam-ı şahanenin vaki' olacak		
		2	hususatlarına bakmak üzere memur		
		nefer	olunan adamlara verilen ücret	230	
			Filibeden celb olunan çoban ve		
			ırgadların memurune Filibe		
			sandığından verilen harcırahı	250	
				2015	**30**

Figure A3 Transliteration of BOA.*HH.d 617*, 61.

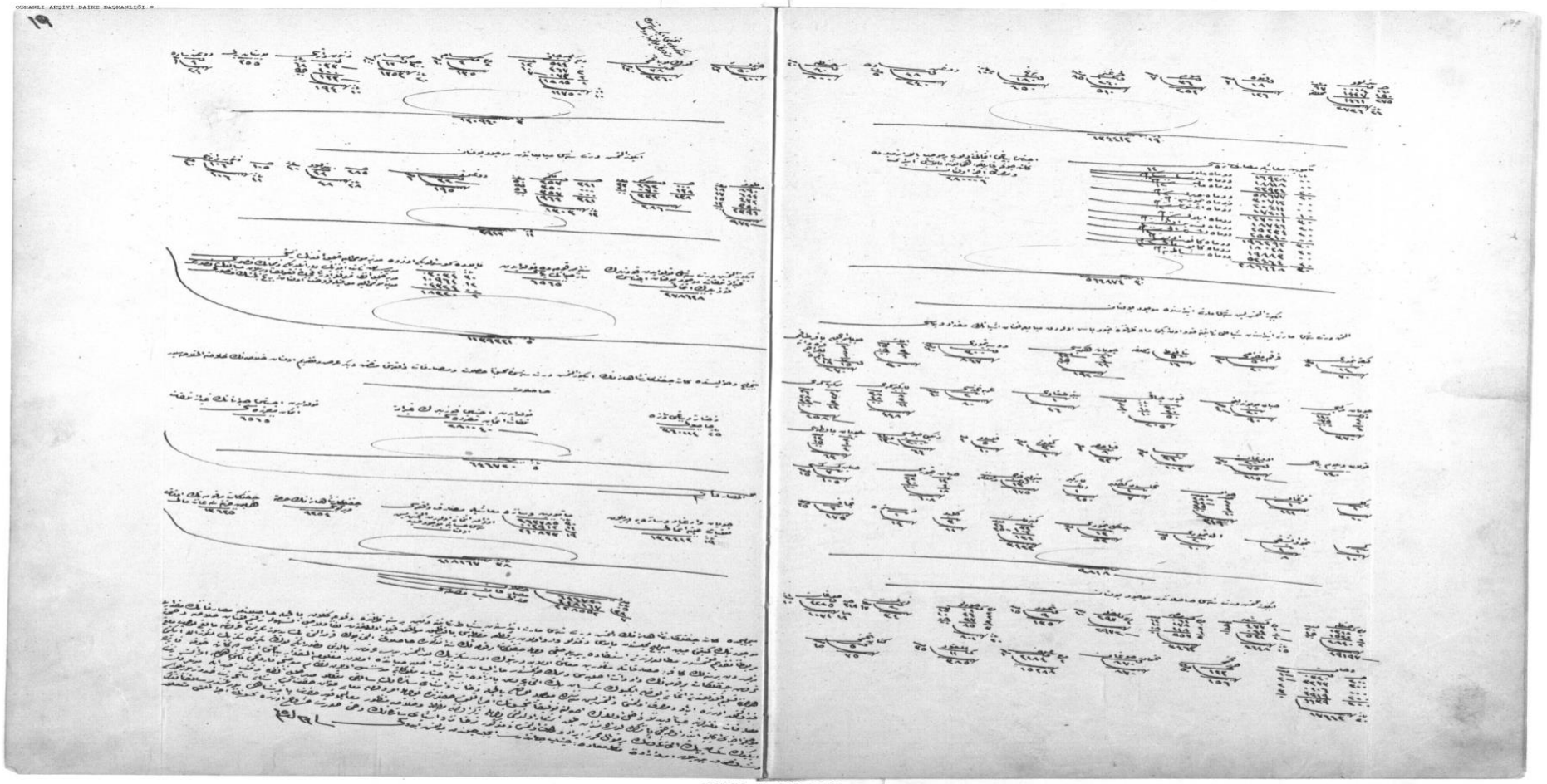


Figure A4 Final calculations at the annual level for the year 1264
Source: BOA. *HH.d 617*, 19 (on the bottom left of the page.

Mihaliç ve havalisinde kain çiftlikat-ı şahanenin 264 senesine mahsuben hasılat ve mesarifat-ı vakıasını mutazmmın diğer arz ve takdim olunan
hülasanın hülasa'ül-hülasasıdır

Hasılat	*Guruş*
Zehair ve yapağı ve saire hasılatı	360,114
Tevlid eden ecnas-ı kuzu bedel-i gayr-i ez telefat esmanı müferredesi	289,040
Tevlid eden ecnas-ı hayvanatın gayr-i ez telefat-ı esman müfedderesi	6565
	642,720
Elmesarifat	*Guruş*
Çoban ve ırgad ve saireye verilen tayinat-ı ayniye esmanı	134,412
Memurin ve saire maaşıyla mesarif-i vakıası	290,873
Erzak esmanı olarak 65 senesi hesabına mevcud kayd olunan	
Çiftlikat-ı şahanenin hisse-yi vergüsü	9255
Çiftlikat-ı merkumenin evkaf-ı hümayun hazinesine ait malı	13,625
	418,167
Varidat-ı aslıye	228,552

Mihaliçde kain çiftlikât-ı hümayunun altmış dört [1264] senesi mart ibtidasından şubat nihayetine değin bir sene zarfında vuku'a gelen bi'l-cümle hasılatıyla mesarifatının mikdarıyla mevcudunun kemiyetini mübeyyin Mihaliç meclisinden balası defterlü var olan bir kıta mazbatası bi't-tanzim muvafik-ı kuyud olduğundan leffen ve li-ecl-i suhule terkim olunan hülasa dahi merbuten takdim kılınmışdır mütâla'alarından istifade buyrulacağı vechle çiftlikât-ı merkumenin sene-yi mezkurede hasılatı altı yük kırk altı bin yedi yüz yirmi guruşa baliğ olub meblağ-ı mezburdan bir senelik kaffe-yi mesarifatıyla memurin maaşı olan dört yük on sekiz bin yüz altmış yedi guruş bi'l-deyn kusur iki yük yirmi sekiz bin beş yüz elli iki guruş çiftlikât-ı merkumenin varidat-ı aslıyesi dimek bulunmuşdur mar'ül-beyan varidat-ı asliye hesabında olan malum'ül-mikdar yapağı İzmidde kain çuka fabrika-yı hümayuna teslim kılındığından esmanı bulunan iki yük seksen bin altı ba-irade-yi seniye-yi cenab-ı mülükane Mürsel olan nizam mucebince barutcubaşı Höce Avanese zimmet kayd olunmak üzere irad ve masraf olunmuş ve altmış beş senesinde mevcud bulunan bi'l-cümle zehair ve eşya-yı sairenin sabıkı misüllü müdir Halil Efendiye zimmet kayd ile yedlerinden mesarifat defterlerine ainen ve bedelen dahil edilmek usulüne tevfiken mahsubunun icra olunması haklarında ne vechle emr-ü-ferman … hazret-i şinas saime zimmet sudur buyrulur ise mucebince icrası icabına ibtidar olacağını ba-tezkire led'el-istizan tabk-ı işar olunduğu vechle zikr olunan mazbata ve hülasa manzur-ı mesali .. hazret-i padişahi buyrulmuşdur salif'ül-zikr iki yüz seksen bin altmış guruşun ber-minval-i muharrer irad ve sarf olunması ve mezkur zehair ve eşya-yı sairenin dahi suret-i meşruh üzere mahsubunun icra kılındığı müteallik ve şeref-sudur buyrulan emr-ü-irade-yi …-yi cenab-ı cihandari ıslahatından bulunmuş idüğü
fi 29 L sene 65

Figure A5 Transliteration of BOA. *HH.d 617*, 19
Figure Notes: I transliterad only the bottom left.

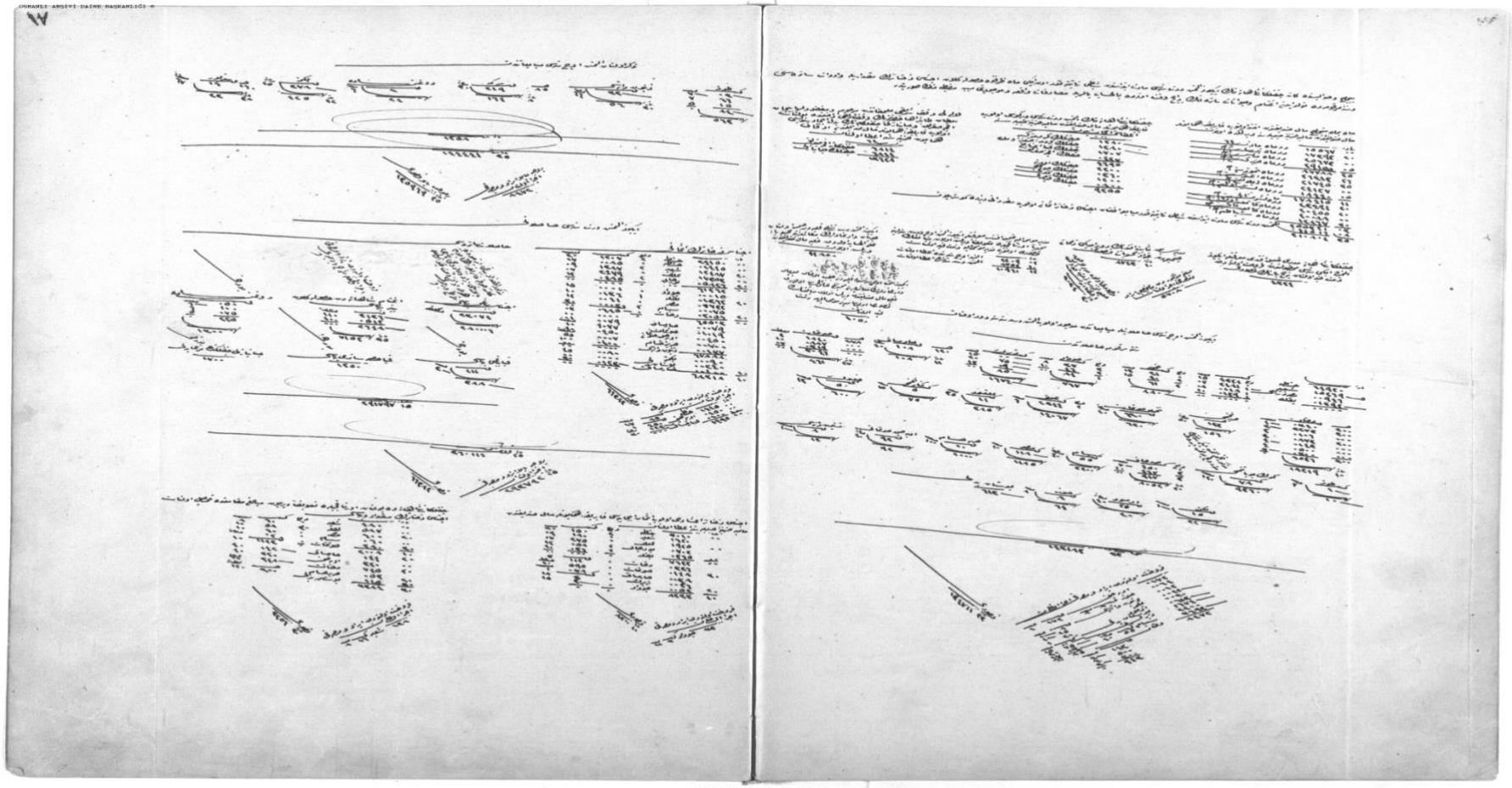


Figure A6 Annual Level Revenue Calculations for the year 1264

Source: BOA. *HH.d 617*, 19. I only transliterated the bottom right and top left of the page.

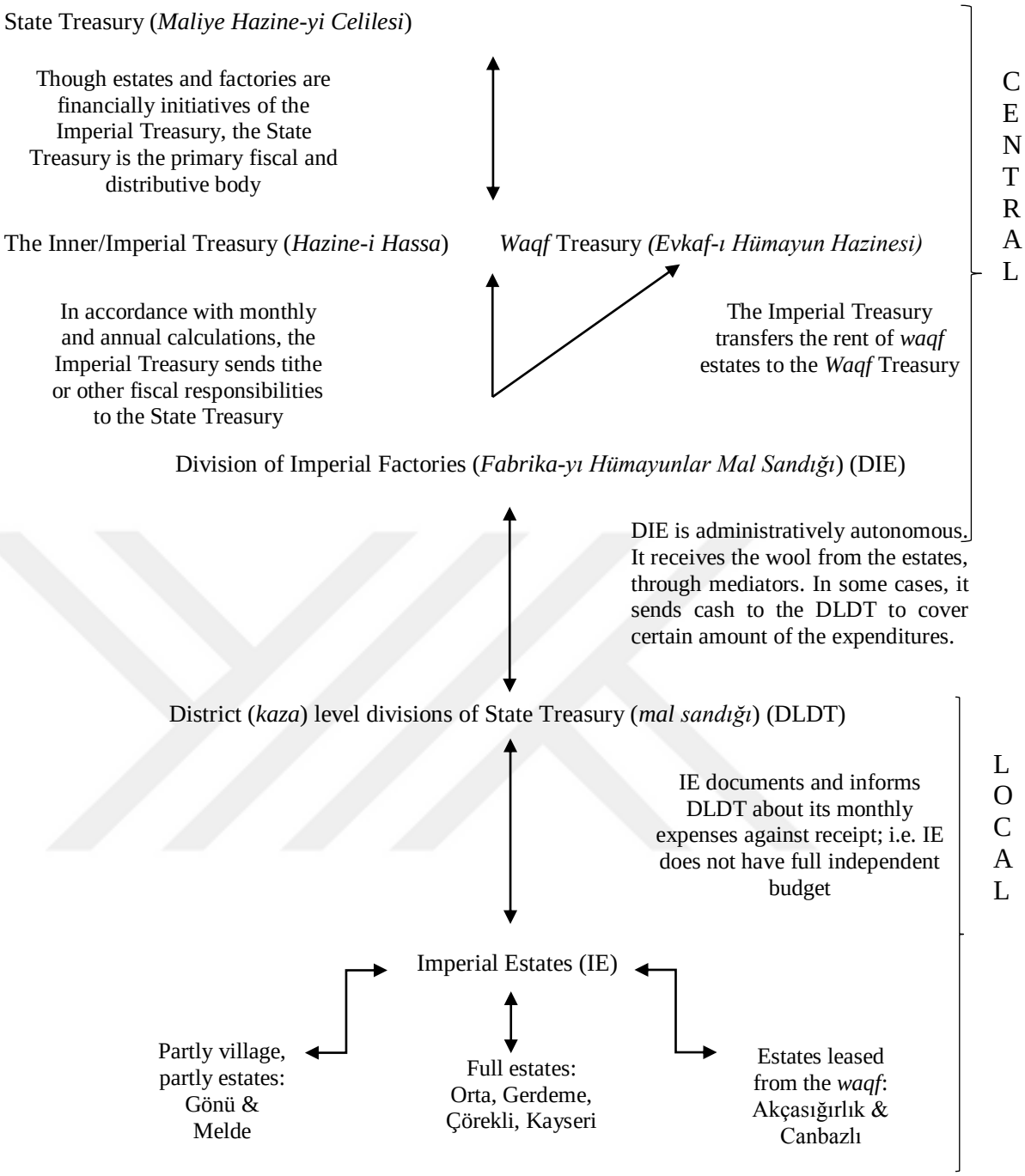


Figure A7 Institutional diagram of expected flow of cash

Figure A8. A collection of the charts of individual landed estates

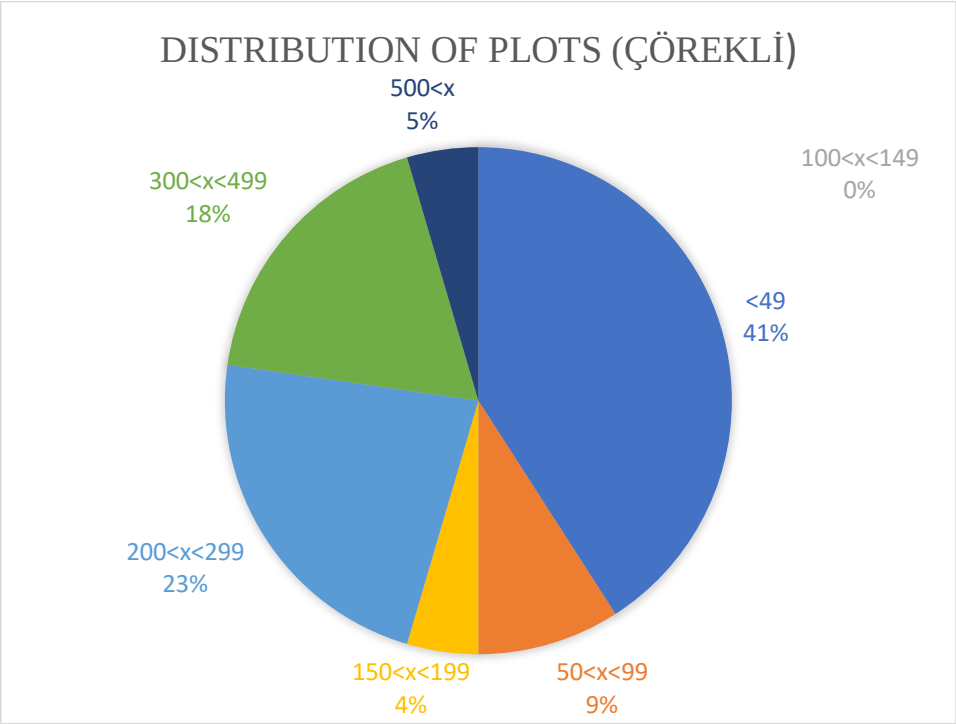


Figure A8.1 Distribution of plots for Çörekli

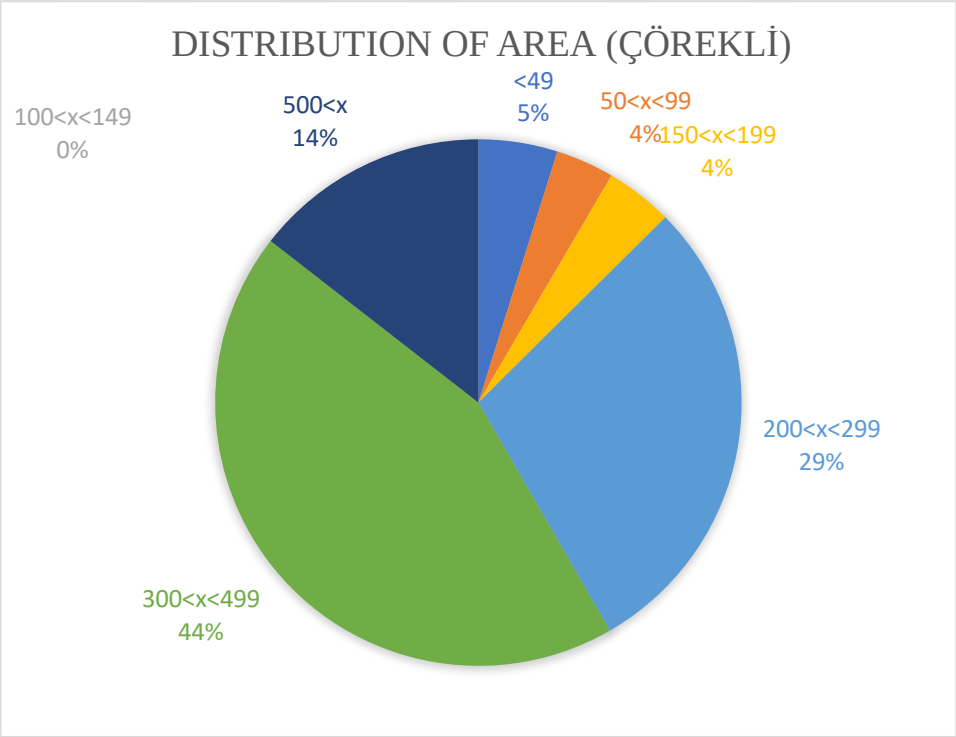


Figure A8.2 Distribution of area for Çörekli

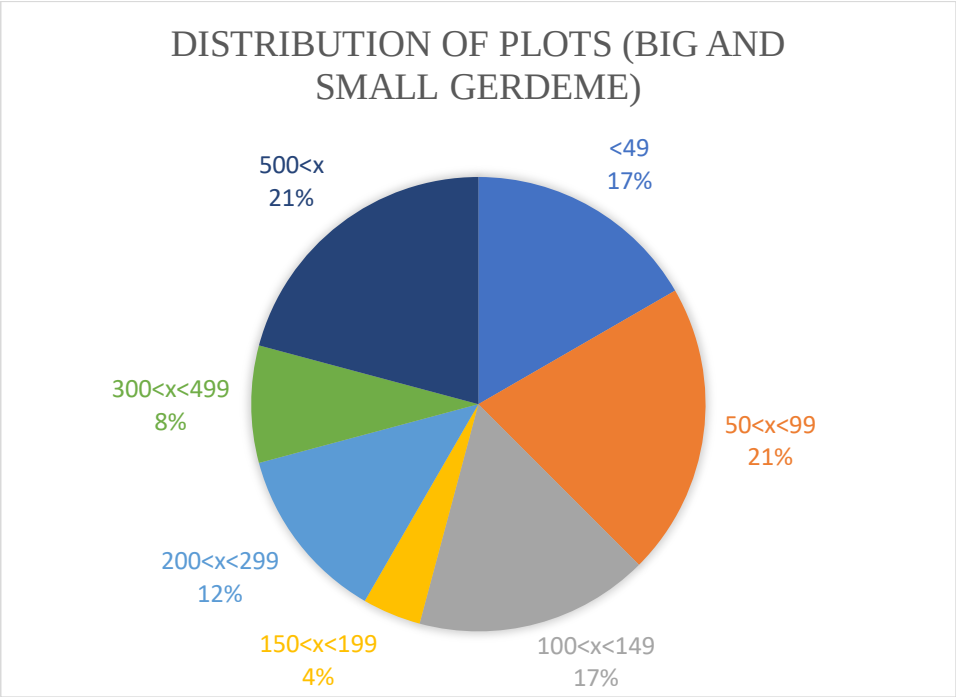


Figure A8.3 Distribution of plots for big and small Gerdeme

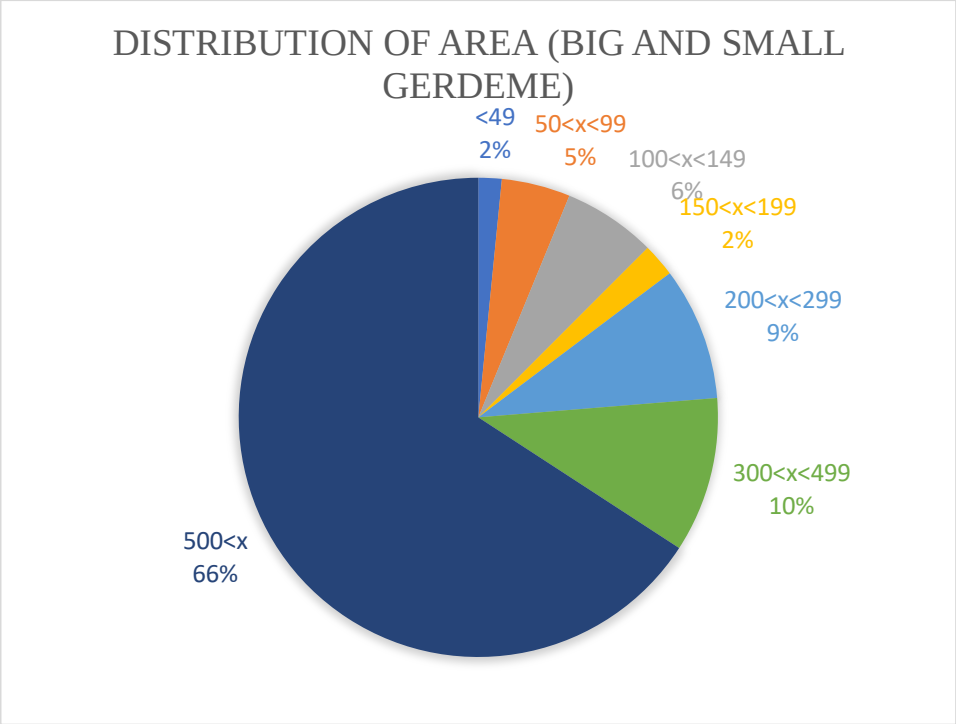


Figure A8.4 Distribution of area for big and small Gerdeme

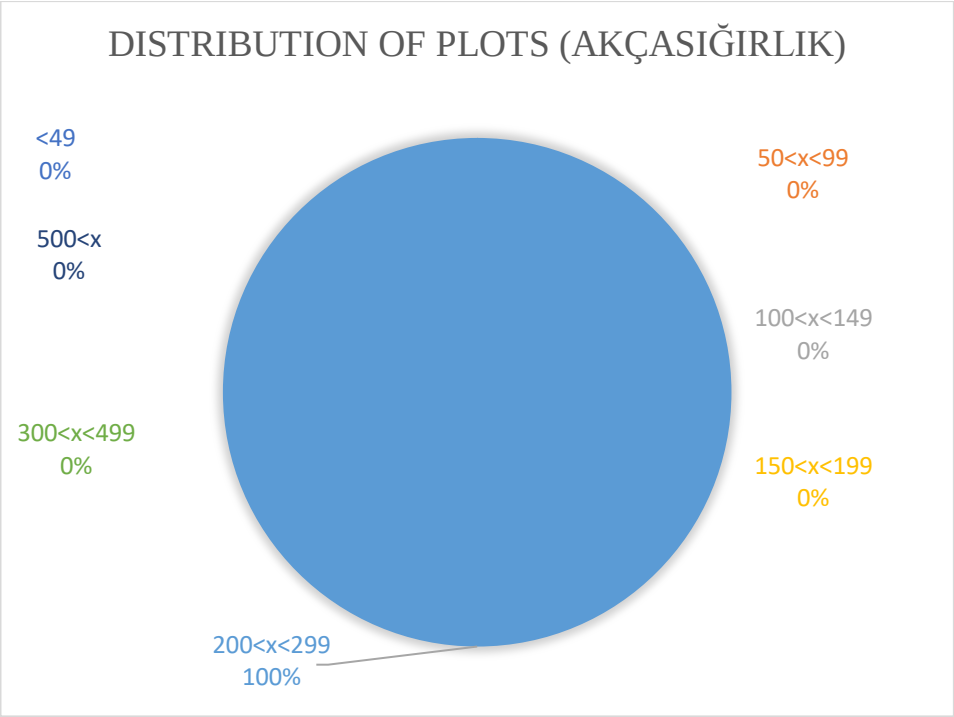


Figure A8.5 Distribution of plots for Akçasığırlık

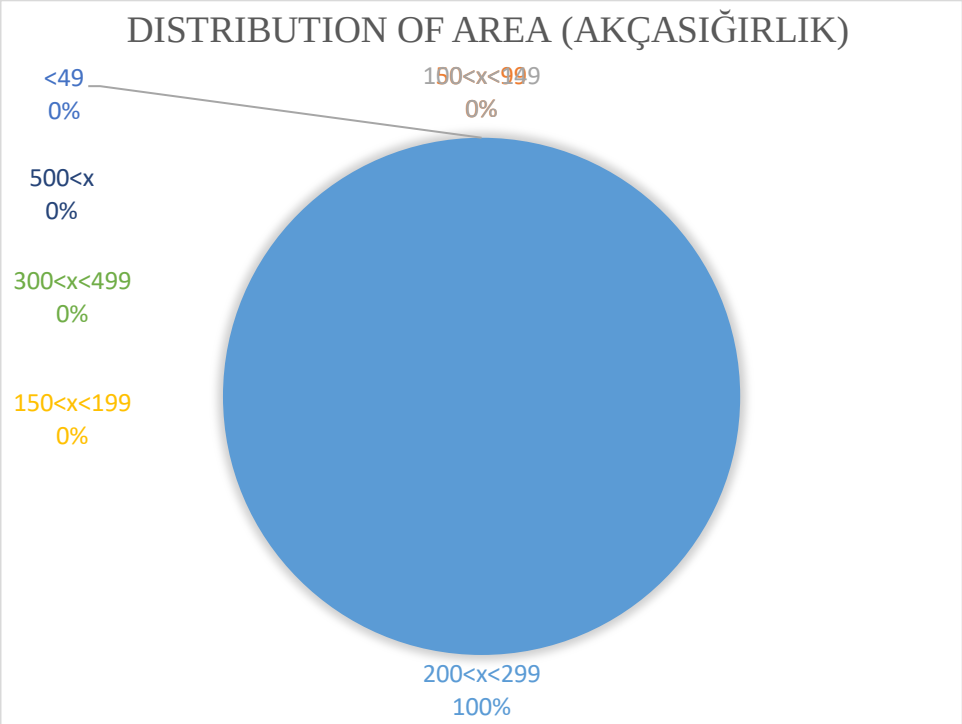


Figure A8.6 Distribution of area for Akçasığırlık

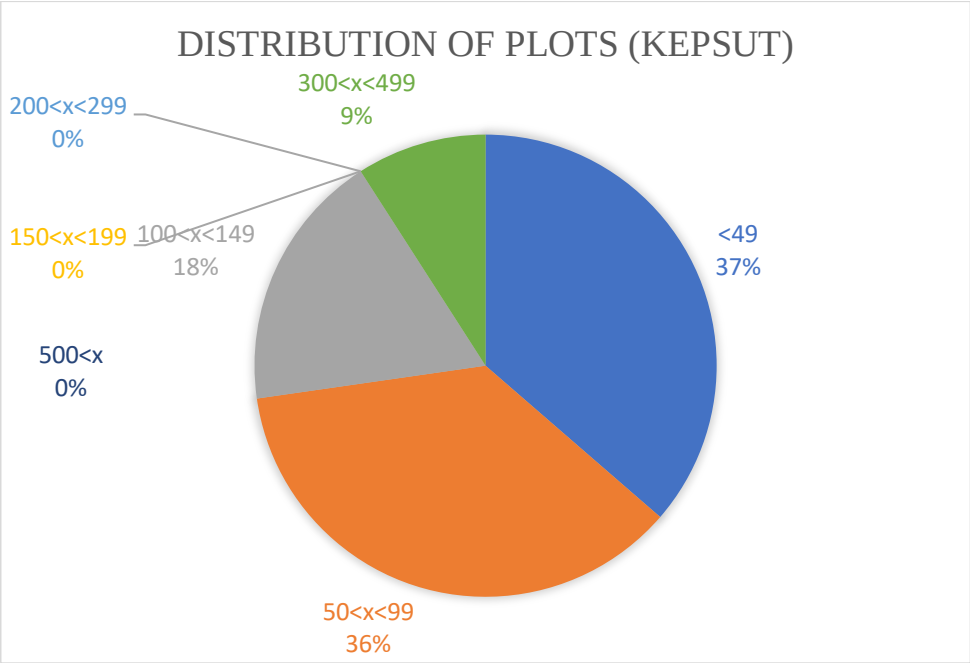


Figure A8.7 Distribution of plots for Kepsut

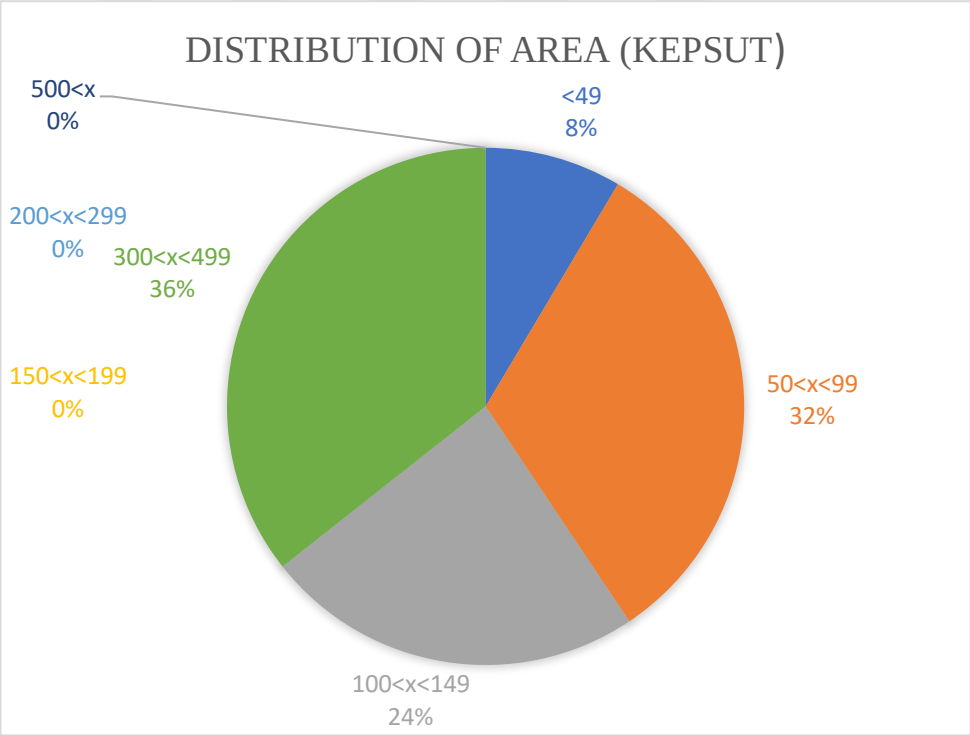


Figure A8.8 Distribution of area for Kepsut

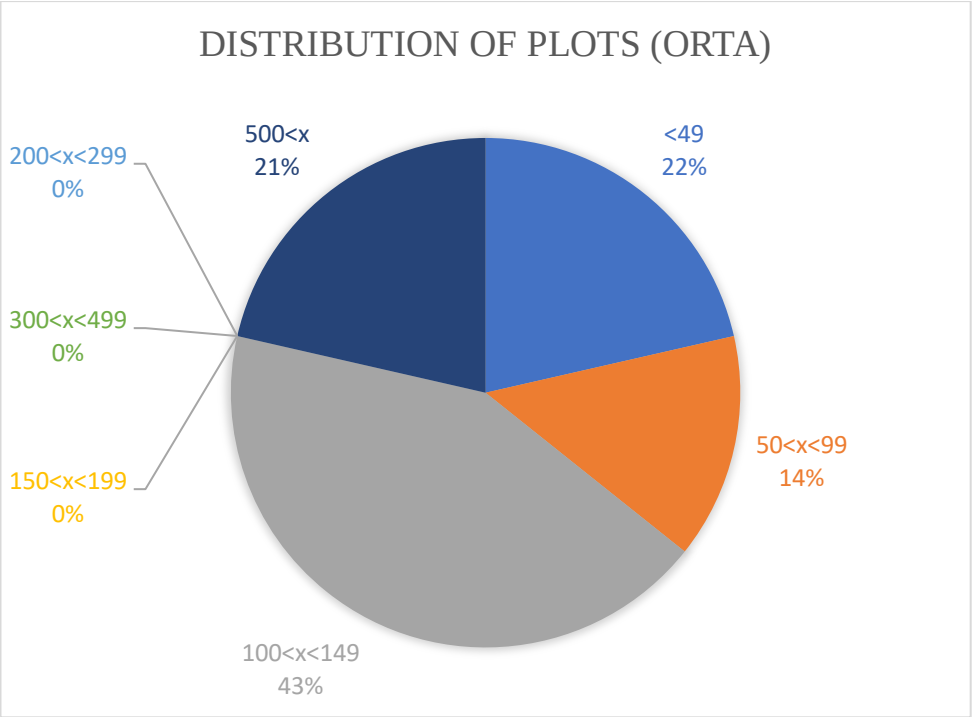


Figure A8.9 Distribution of plots for Orta

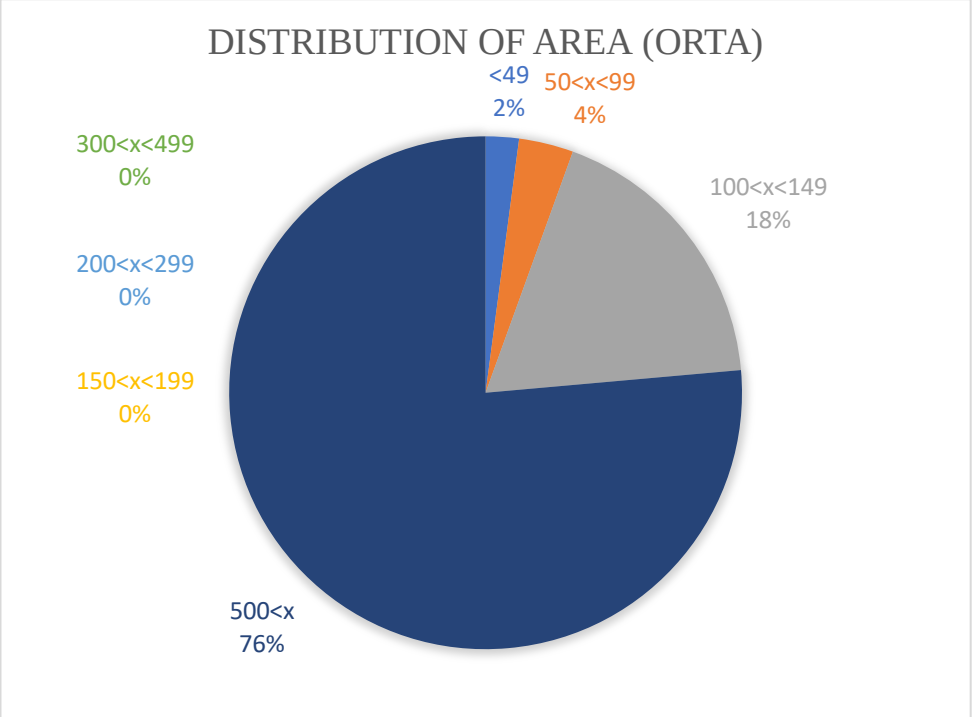


Figure A8.10 Distribution of area for Orta

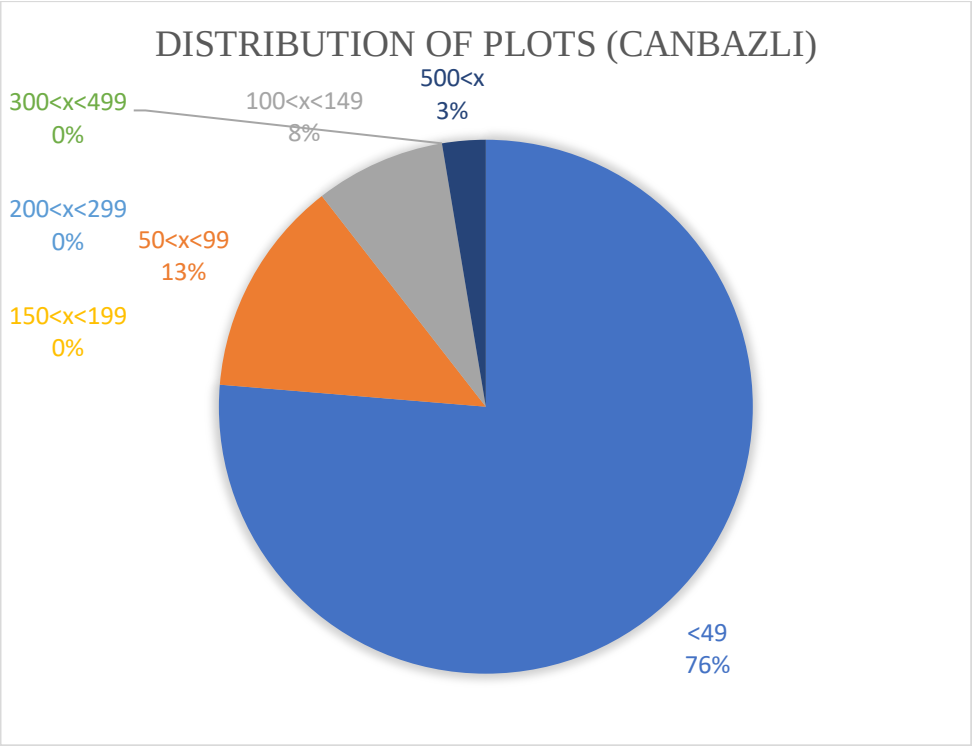


Figure A8.11 Distribution of plots for Canbazlı

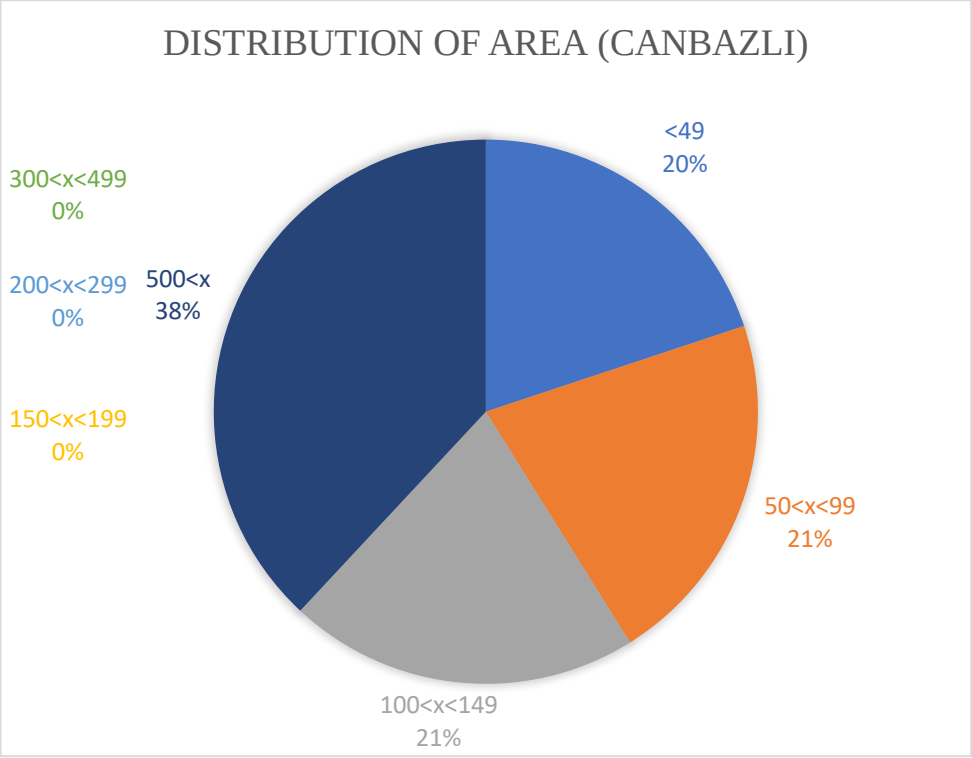


Figure A8.12 Distribution of area for Canbazlı

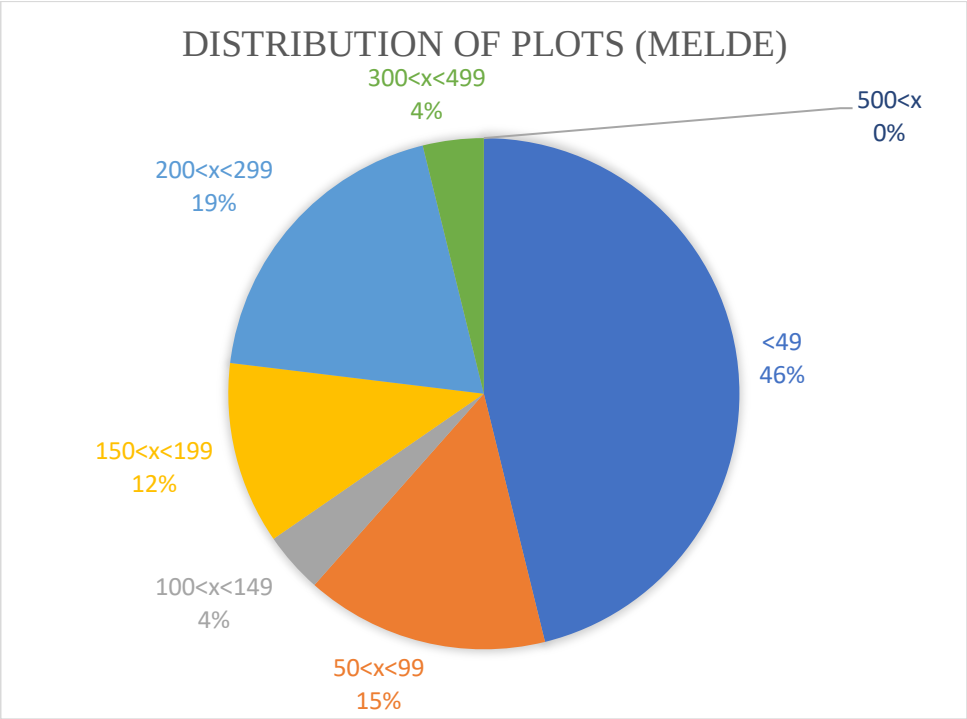


Figure A8.13 Distribution of plots for Melde

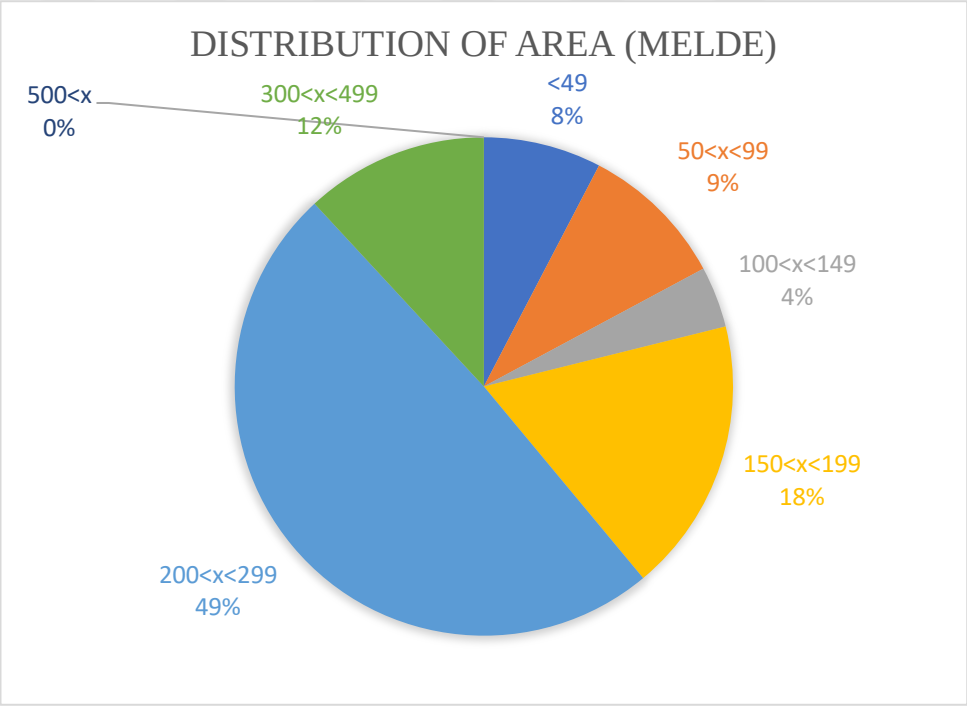


Figure A8.14 Distribution of area for Melde

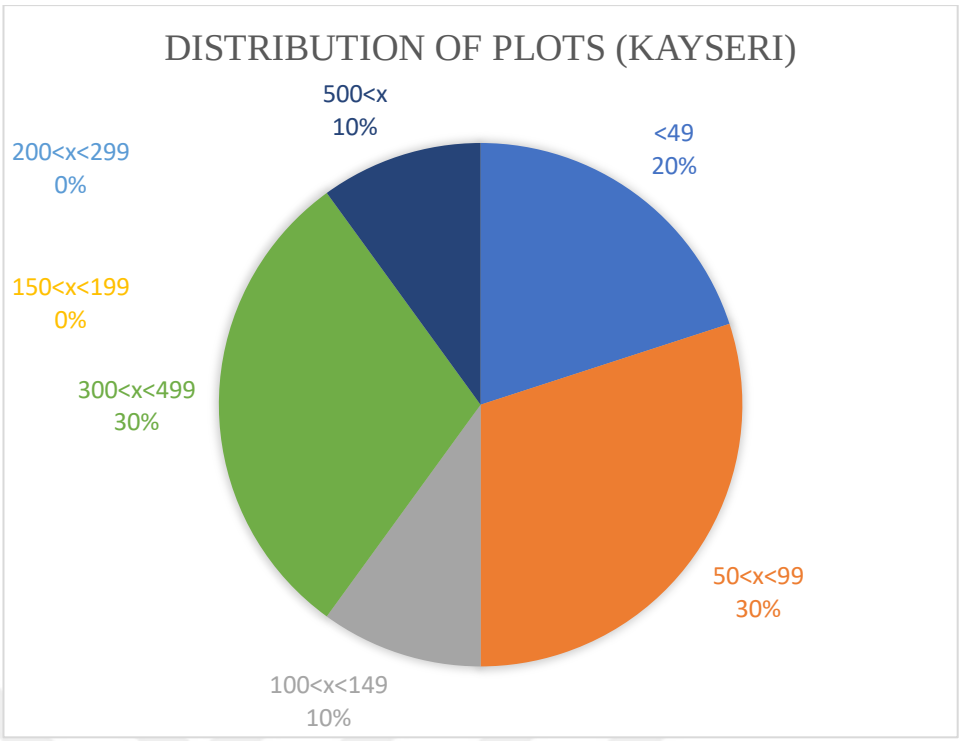


Figure A8.15 Distribution of plots for Kayseri

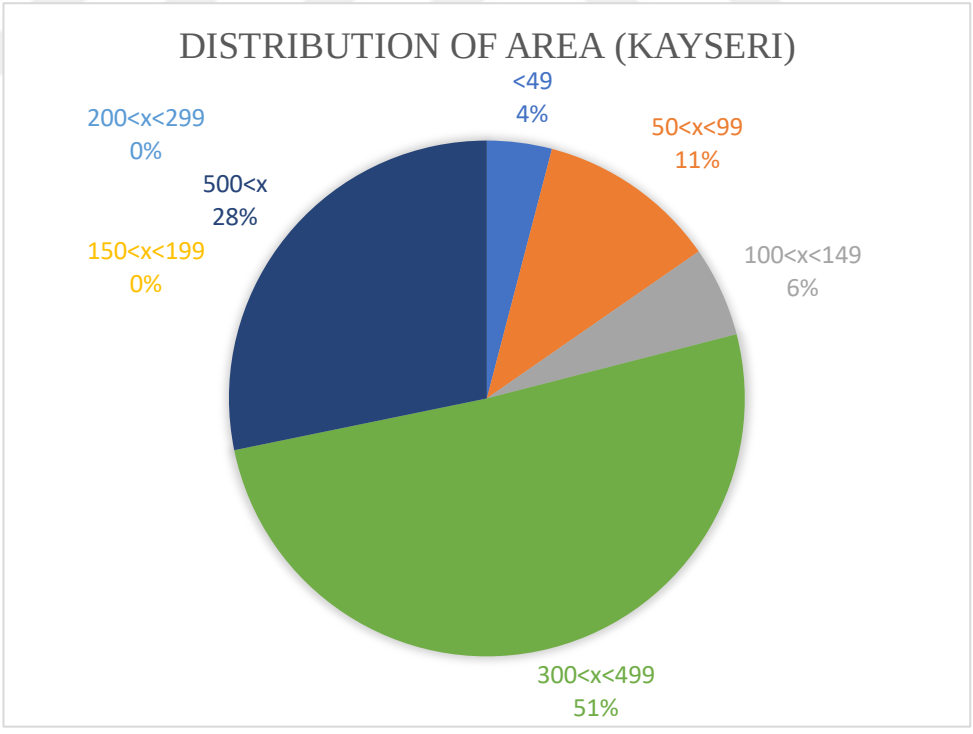


Figure A8.16 Distribution of area for Kayseri

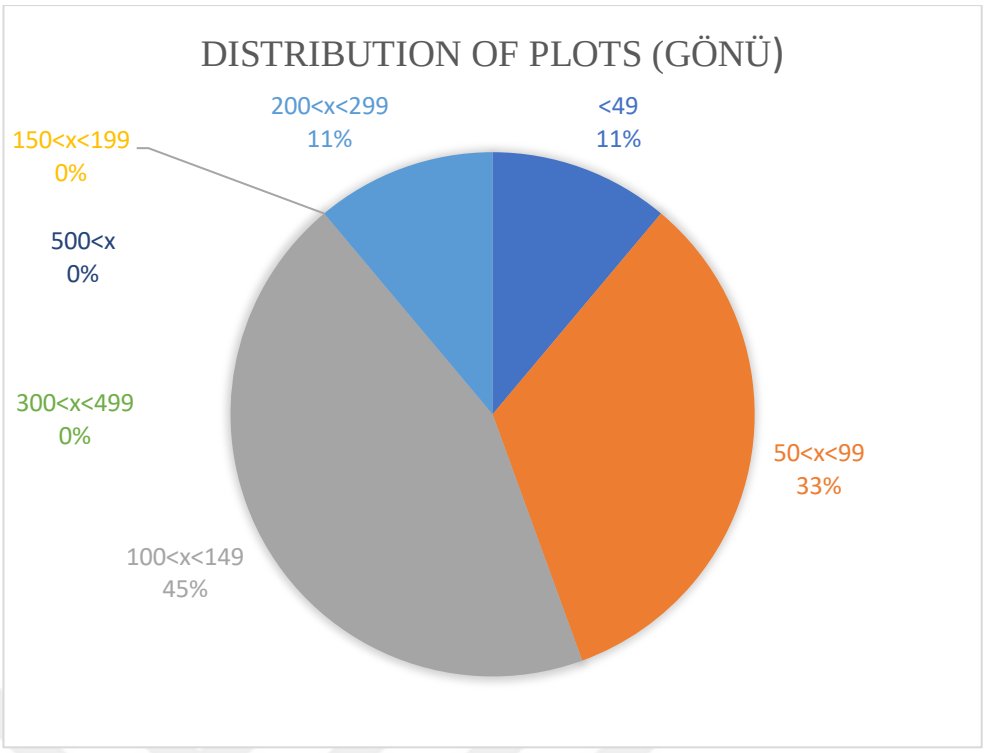


Figure A8.17 Distribution of plots for Gönü

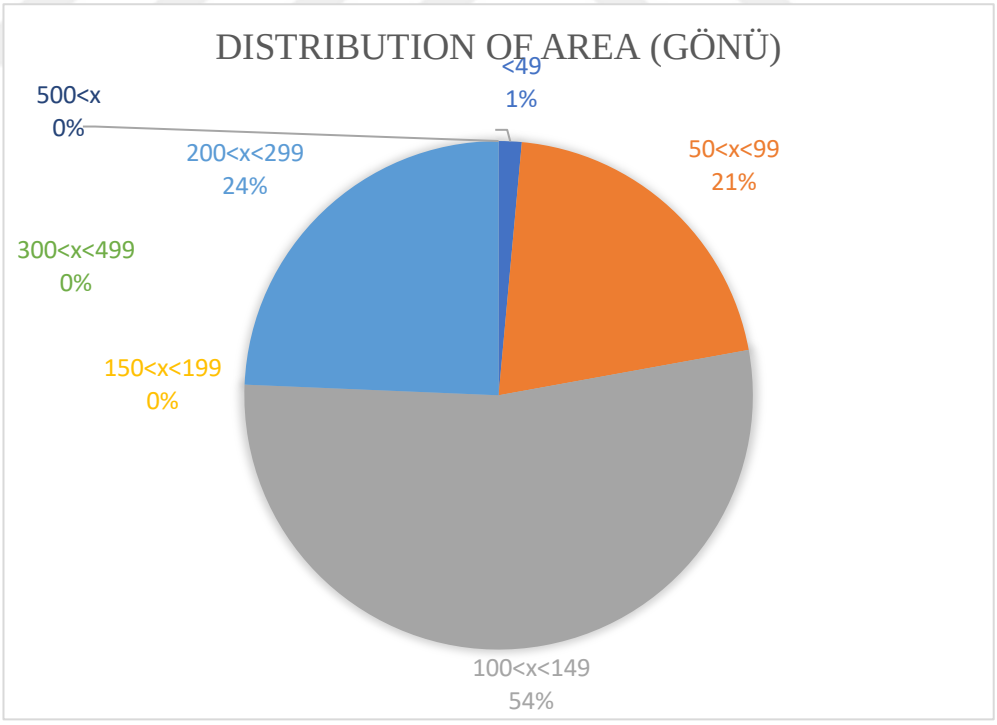


Figure A8.18 Distribution of area for Gönü

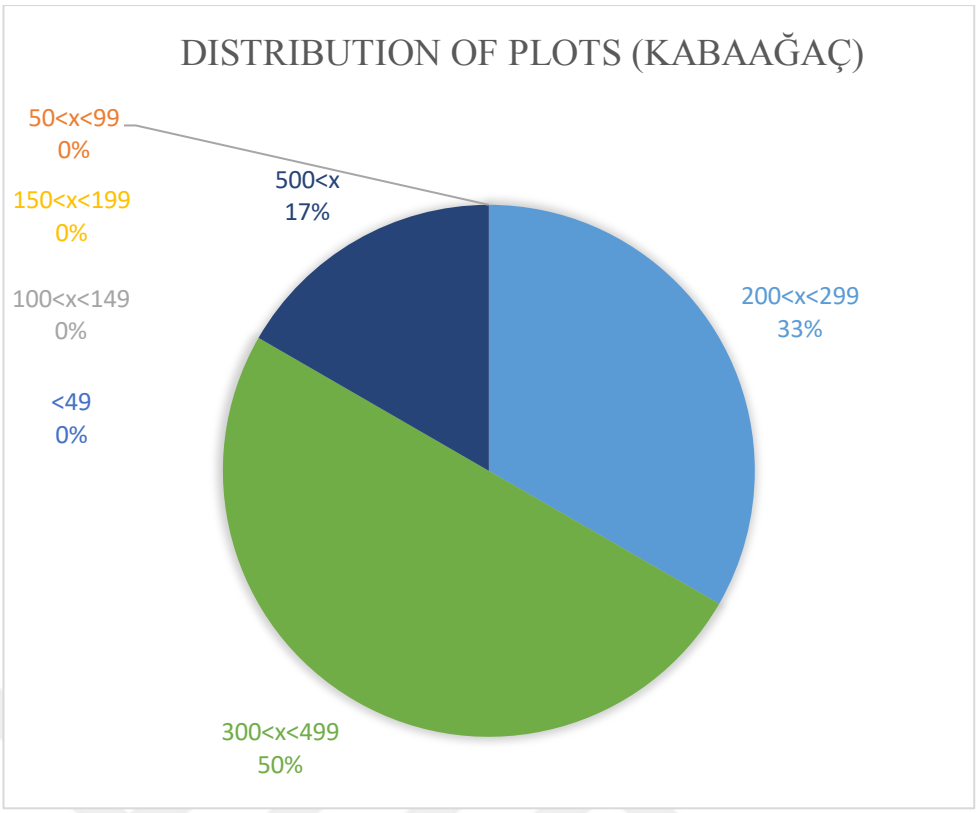


Figure A8.19 Distribution of plots for Kabaağaç

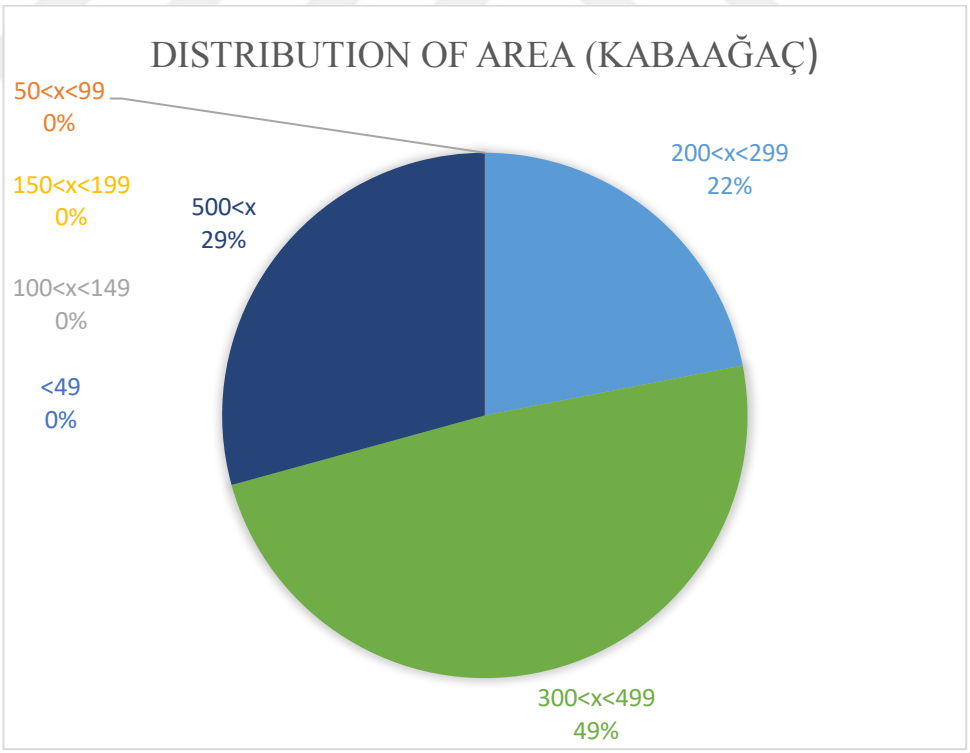


Figure A8.20 Distribution of area for Kabaağaç

Source: Table B5. BOA. *HH.d 616*, 84-87

APPENDIX B

DATA ON PRODUCTION AND LAND SURVEY

Table B1. Production Estimate for more Labor Intensive/Commercially Valuable Crops

1846-7*	Tobacco	Maize	Sesames	Onion	Garlic
Orta Çiftlik	120	0	5	220	43
Gerdeme	125	0	0	207	100
Çörekli	65.5	0	0	90	0
Gönü	33	0	0	155	33
Melde	134.5	0	0	215	24
Kayseri	123	4	0	0	0
Akçasığırlık	3.5	3	0	10	0
Canbazlı	3.5	6	0	143.5	0
Annual Produce	4188.37	337.68	32.82	11135.45	1313.19
Tithe to State Trs.	601	4	5	887	200
Tithe to Waqf Trs.	7	9	0	153.5	0
Tithe as % of Production (S)	15.23	8.72	6.88	18.34	17.69
Tithe as % of Production (W)	2.89	15.01	10.22	21.4	0
Net Annual Production Total Purchase	3580.37	324.68	27.82	10094.95	1113.19

1847-48	Tobacco	Maize	Sesames	Onion	Garlic
Orta Çiftlik	659	0	51	1210	256.5
Gerdeme	687.5	0	0	1139.5	550
Çörekli	360.5	0	0	495	0
Gönü	40	2.5	1	542.5	152
Melde	437.5	0	0	699	93
Kayseri	558.5	25	0	0	0
Akçasığırlık	42	34	0	0	0
Canbazlı	38.5	61	0	1448.5	0
Annual Produce	2823.5	122.5	52	5534.5	1051.5
Tithe to State Trs.	389.5	5	5	887	201
Tithe to Waqf Trs.	7	9	10	143.5	0
Tithe as % of Production (S)	14.19	18.18	9.61	21,70	19.11
Tithe as % of Production (W)	8.69	9.47	19.23	9,90	0
Net Annual Production Total Purchase	2427	108.5	37	4504	850.5

1848/49	Tobacco	Maize	Sesames	Onion	Garlic
Orta Çiftlik	170.33	0	0	269	0
Gerdeme	0	0	0	247.5	0
Çörekli	282	0	0	115.5	0
Gönü	165	0	0	2640	240.5
Melde	0	0	0	0	0
Kayseri	0	0	0	0	0
Akçasığırlık	180	0	3	0	0
Canbazlı	0	74	0	1704	0
Annual Produce	797.33	74	3	4976	240.5

1849/50	Tobacco	Maize	Sesames	Onion	Garlic
Orta Çiftlik	229.5	0	0	165	0
Gerdeme	276	0	0	423	550
Çörekli	0	12	60	350	0
Gönü	54	0.5	2	0	0
Melde	80	0	1	0	0
Kayseri	62	0	14	0	0
Akçasığırlık	0	91	21.74	0	0
Canbazlı	0	20	4.5	0	0
Annual Produce	701.5	123.5	103.24	938	550

Tithe to State Trs.	112	0	0	595	38	Tithe to State Trs.	122.5	1	8.5	142	100
Tithe to Waqf Trs.	0	13	0	304	0	Tithe to Waqf Trs.	0	20	3	342	0
Tithe as % of Production (S)	14.04	0	0	18.18	15.80	Tithe as % of Production (S)	17.46	8	11.03	15.13	18.18
Tithe as % of Production (W)	0	17.56	0	17.84	0	Tithe as % of Production (W)	0	18.01	11.43	36.46	0
Net Annual Production Total Purchase	685.33	61	3	4077	202.5	Net Annual Production Total Purchase	579	102.5	91.74	454	450

Source:
*For the year 1846-7 (1262) there is only the tithe estimation for each individual estate. Therefore, the entries in the first table correspond to the tithe estimated. (BOA, *HH.d* 66, 27)
** In the lack of production data for 1846-7 (1262), I used the average percentages of tithe given out of the production separately to the State Treasury and the *Waqf* Treasury in the following three years, and estimated the annual produce for 1846-7.
*** BOA, *HH.d* 557 90.
(1) BOA, *HH. d* 617, 10.
(2) BOA, *HH.d* 617, 66

Table B2. Appointed Managers, Stewards, and *Çorbacı*s of the Individual Estates

1264	Official of Çörekli		*Çorbacı* of Çörekli		Officials of Canbaz and Akçasığırlık		Stewards of Orta, Gerdeme and Çörekli		Chief Stewards of Orta and Gerdeme		*Çorbacı* of Orta	
	# of people	wage in *guruş*	# of people	wage in *guruş*	# of people	wage in *guruş*	# of people	wage in *guruş*	# of people	wage in *guruş*	# of people	wage in *guruş*
March	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
April	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
May	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
June	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
July	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
August	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
September	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
October	1	215	2	184	1 or 2	80-162	-	-	2	144	-	-
November	1	200	1	107	2 or 4	162-244	2	200	3	216	4	368
December	1	200	1	107	2 or 4	162-244	2	200	3	216	4	368
January	1	200	1	107	2 or 4	162-244	2	200	3	216	4	368
February	1	200	1	107	1 or 2	80-162	2	200	3	216	4	368
1265												
March	1	200	1	107	1 or 2	80-162	2	200	3	216	4	368
April	1	200	1	107	1 or 2	80-162	2	200	1	72	4	368
May	1	200	1	107	1 or 2	80-162	2	200	4	288	4	368
June	1	200	1	107	1 or 2	80-162	2	200	4	288	4	368
July	1	200	1	107	1 or 2	80-162	2	200	4	288	4	368
August	1	200	1	107	1 or 2	80-162	2	200	4	288	4	368
September	1	200	1	107	1 or 2	80-162	2	200	4	288	4	368
October	1	200	0	107	1 or 2	80-162	2	200	4	288	4	368
November	1	200	0	0	-	-	2	300	4	288	2	184
December	1	200	0	0	-	-	3	300	4	288	2	184
January	1	200	1	0	-	-	3	300	3	216	2	184
February	1	200	1	92	1 or 2	80-162	3	300	3	216	0	0

Source: BOA. *HH.d 617*, 3-19, 13,17, 53-65

Table B3. Detailed List of Plots and Their Sizes in *dönüm* in Individual Landed Estates within the Complex of Imperial Landed Estates of Mihaliç

Kirmasti kazasına tabi' Çörekli Çiftlik-i Hümayunun arazisi	Kıta	Dönüm
Çiftlik-i mezbur önünde hidmet yeri bir yarafı mandıra bir tarafı kerpiç … bir tarafı koyun mandırası	1	10
Samanlık arkasında Soğanlık tabir olunur Arpalık tarla demeğle maruf	1	2
Tatlı Kuyubaşında Saray Mahali demeğle maruf tarlanın bir tarafı Karagöl ırmağı bir tarafı Çiftlik-i Hümayun bir tarafı Doğancı tarlası	1	20
Bakla Yeri demeğle maruf tarlanın bir tarafı Terazi yolu bir tarafı Saray mahali	1	20
Doğancı tarlası demeğle maruf bir tarafı Çiftlik-i Hümayunun hidmet mahali bir tarafı Terazi Yolu bir tarafı Çiftlik merası	1	525
Kuyubaşında vaki' tarlanın bir tarafı Uluyol bir tarafı Dönbe yolu bir tarafı Canlı-Oğlu-Tarlası bir tarafı Hacı Hasan tarlası	1	24
Erikli Başında vaki' tarlanın bir tarafı Dönye yolu bir tarafı Uluyol bir tarafı Erikli ırmağı bir tarafı tarik-i 'amm	1	440
İncirlik mahalinde vaki tarlanın bir tarafı Terazi yolu bir tarafı Karagöl ırmağı bir tarafı Kalçacı mahali	1	150
Keşana kapusunda vaki' tarlanın bir tarafı Azmak bir tarafı Çörekli yolu bir tarafı Çiftlik-i hümayun merası	1	255
Çiftlik-i hümayun arpalığı demeğle maruf tarlanın bir tarafı iki koyun kışlağı bir tarafı saray yeri bir tarafı Karagöl ırmağı	1	300
Kilisecik nam tarlanın bir tarafı Karagöl ırgamı bir tarafı Çörekli yolu bir tarafı Mermere-Kırşani … oğlu tarlası	1	450
Yerebakan tarlanın bir tarafı büyük Terazi bir tarafı Karagöl ırgamı bir tarafı Ulubad caddesi	1	400
Dere tarla demeğle maruf bir tarafı Çatlak tarlası bir tarafı 'Abadi tarlası bir tarafı Kangal oğlu Süleyman tarlası	1	200
Ahmed oğlu tarlası demeğle maruf bir kıta Serdar oğlu tarlası bir tarafı Karıncık Çukuru bir tarafı Balıkesir yolu	1	30
Bayer tarlası demeğle maruf bir kıta Kabaağaç bir tarafı Gerdeme bir tarafı mera bir tarafı dere	1	200
Sürili tarlası demeğle maruf bir tarafı Süleyman Bey tarlası bir tarafı Manyas oğlu tarlası bir tarafı dere	1	20
Direğli oğlu tarlası demeğle maruf bir tarafı Hacı İbrahim tarlası bir tarafı Çörekli merası tarafeyni tarik-i amm	1	80
Zincirli nam tarlanın bir tarafı Hacı İbrahim tarlası bir tarafı Azmak bir tarafı Karabacak tarlası bir tarafı Çarınlık	1	30
Karatoprak nam tarlanın bir tarafı Hacı İbrahim tarlası bir tarafı Brusa yolu bir tarafı Karagöl Irmağı	1	50
Büyük Terazi başındav aki' tarlanın bir tarafı Kabaağaç yolu bir tarafı Gerdeme yolu tarafeyni çayırlık	1	20
Bağçevan mahali demeğle maruf tarlanın bir tarafı Hacı İbrahim tarlası bir tarafı Kabaağaç yolu bir tarafı tarik-i amm	1	200
Doğancı mahali demeğle maruf tarlanın bir tarafı Deveci yolu tarafeyni Göl ırgağı	1	200
	22	3626
Çiftlik-i hümayun-ı mezkurun müstakilen havi olduğu merasının bir tarafı Mihaliçden gelen Uluyoldan Keşane kapusuna ondan Dönye karyesinde Kayaağaça giden yol ondan Komlar nam mahalden Karaçalıya ondan Harem-Ağılı Çiftliğine doğru gidib sürekli dereye ondan kasaba bulunca Karaağaç Çiftlik-i hümayun merasından Büyük Tarla önüne İDEN Baş-Teraziye ondan Karagokadan Mermere-Kıristane ondan Mihaliçe giden kasaba yoluna ondan		8374
		12.000

Mihaliç kazasına tabi Gerdeme-yi Kebir ile Aşağı Gerdeme Çiftlik-i Hümayunun arazisi	Kıta	Dönüm
Kasaba yolu demeğle maruf bir tarafı Kangal Oğlu tarlası bir tarafı Kabaklı-Çeşme başı bir tarafı Gerdeme yolu	1	300
Karagöl tarlası demeğle maruf bir tarafı Azmak bir tarafı Kabaklıçeşme çayırı bir tarafı Kurban-Gören tarlası	1	60
Tokmaklı Azmak tarlası demeğle maruf bir tarafı Kangal oğlu tarlası bir tarafı dere tarlası bir tarafı Azmak bir tarafı Kangal oğlu tarlası	1	100
Deşebaş tarlası demeğle maruf bir tarafı Azman bir tarafı Dönbe yolu bir tarafı Kangal oğlu tarlası bir tarafı Göl tarlası	1	50
Kabaklıçeşme tarlası demeğle maruf bir tarafı Gören-Ferban tarlası bir tarafı Kemerbaşı bir tarafı Cevizli dere bir tarafı Kebir Gerdeme tarlası	1	400
İncirli tarla demeğle maruf bir tarafı Uluyol bir tarafı Kasaba yolu bir tarafı çayır bir tarafı Küçük Gerdeme tarlası	1	200
Tokmaklı ırmağı başı demeğle maruf bir tarafı Derdem Bey yolu bir tarafı mera tarafeyni kasaba yolu	1	600

Çayır ortasında Tebe tarla demeğle maruf bir tarafı Azman tarafeyni Mihaliç yolu bir tarafı Azmak	1	30
Boyalık tarla demeğle maruf bir tarafı Gerdeme yolu bir tarafı Öküz çayırı bir tarafı Cevizli dere yolu	1	200
Veli Said Bey tarlası demeğle maruf bir tarafı Saz-ayağı bir tarafı Kara-Pikad ayağı bir tarafı kasaba yolu bir tarafı çiftlik-i hümayun tarlası	1	60
Kışlak karşusunda Arpalık demeğle maruf bir tarafı Kara-çeşme ayağı bir tarafı Kayseriye yolu bir tarafı çiftlik çayırı	1	30
Çatalçeşme tarlası demeğle maruf bir tarafı Kayseri yolu bir tarafı Çatal-çeşme bir tarafı Kayseriye yolu	1	1000
Cerimli/Sarımlı tarla demeğle maruf bir tarafı Dönbeden kasabaya giden yol bir tarafı Çatalçeşme arasından Dere-arası bir tarafı Kayseri yolu	1	1500
Çadırılan tarlası demeğle maruf bir tarafı kasaba yolu bir tarafı Hamşir çayır bir tarafı Sazlık bir tarafı Karaçeşme ağacı	1	800
Malankoz tarlası demeğle maruf bir tarafı yol bir tarafı Yakub tarlası bir tarafı Kangal Oğlu tarlası	1	120
Sedar oğlu tarlası demeğle maruf bir tarafı Mihaliç yolu bir tarafı Yakub tarlası bir tarafı Azmak bir tarafı Malankoz tarzlası	1	60
Yine Serdar oğlu tarlası demeğle maruf bir tarafı Kangal tarlası bir tarafı yol bir tarafı Azmak bir tarafı Harem ağılı yolu	1	30
Azmak arası tabir olunan tarlanın bir tarafı Azmak bir tarafı çayır bir tarafı saz	1	150
Çiftlik-i hümayunun önünde tarlanın bir tarafı Çiftlik yolu bir tarafı saz ayağı bir tarafı hizmet yeri	1	80
İncirli tarlası demeğle maruf bir tarafı çayır bir tarafı Mihaliç yolu bir tarafı Veli Hüseyin yolu Kisüd yolu	1	15
Kum tarla demeğle maruf bir tarafı yol bi tarafı çayır bir tarafı Paşa Gölü yolu bir tarafı Azmak başı	1	100
Gönü çiftlik-i hümayunun hududunda bir kıta tarlanın bir tarafı Uluyol bir tarafı kasaba yolu bir tarafı Veli Hüseyin tarlası	1	200
Gönü karyesinde vaki' kahve ittisalinde tarlanın bir tarfı çiftlik-i mezbur bir tarafı Uluyol bir tarafı karye-yi mezkur	1	500
Kavak tarlası demeğle maruf bir tarafı Uluyol bir tarafı Gönü çiftliği tarlası bir tarafı Büyük Gerdeme tarlası bir tarafı çayır	1	100
	24	6685
Çifltik-i hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Çatalçeşmeden kasa yolundan Kabaklı yoldan Kemre-köbrüye kadar ondan Karaağalıktan ondan Çend-Taşlar saz yolunca çeşid çayır ondan Çatalçeşmeye kadar müntehid olduğu mera		4500
		11,185

Kirmasti kazasına tabi Gönü Çiftlik-i hümayunun arazisi	Kıta	Dönüm
Çalı tarla demeğle maruf bir tarafı kasaba yolu bir tarafı 'ark bir tarafı Karban oğlu tarlası bir tarafı mera	1	60
Kahve ittisalinde tarlanın bir tarafı Ulubol bir tarafı Sagir-Gerdemenin tarlası bir tarafı kasaba	1	100
Ağıl ittisalinde tarlanın bir tarafı Yakub Oğlu tarlası bir tarafı Değirman yolu bir tarafı Koca Mehmed tarlası	1	100
Kerpiçbaşı demeğle maruf bir tarafu Derdem Beyi Hacı Ahmed oğlu tarlası bir tarafı Koca Mehmed tarlası bir tarafı değirmen	1	50
Kemrez tarla demeğle maruf bir tarafı Koca Mehmed tarlası bir tarafı Kesüd tarlası bir tarafı öküz çayırı	1	60
Kangal tarlası demeğle maruf bir tarafı Derdem Bey yolu bir tarafı öküz çayırı bir tarafı Kepsut yolu	1	200
Serdar oğlu tarlası demeğle maruf bir tarafı yol bir tarafı Kanik Mela tarlası bir tarafı Akçayır	1	100
Çiftlik-i hümayun derununda bir kıta Mamur-Pençe	1	12
Bağçe ittisalinde tarlanın bir tarafı Arif bir tarafı Yenice bir tarafı Küçük Gerdeme tarlası bir tarafı yol	1	140
	9	822
Çiftlikat-ı hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Gerdeme çiftlik-i hümayunu altında Umumçeşmesinin Gerenden Tokmaklı ırgmağı ile Torumik karyesinden kirmasti kasabasına giden yola ondan Kara-Golur nam mevzia ondan Mihaliç caddesinden Lazkabusuna ondan Yakub Oğlu tarlasından Halaç yerine ondan yerlerine ondan Keşeler tabir olunan Bolca doğru mezkur Kemerde müntehil olduğu mera		4000
		4822

Kirmasti kazası dahilinde Kayseri Çiftlik-i Hümayunun arazisi	Kıta	Dönüm
Akçatahtası tarlası demeğle maruf bir tarafı Körin oğlu tarlası bir tarafı Kara-İsmail tarlası bir tarafı yol	1	300
Hanım-Çeşmesi tarlası demeğle maruf bir tarafı Hacı Bekir Ağa tarlası bir tarafı Hasan Ağa oğlu Hüseyin tarlası	1	60
Dizbaşı tarlası demeğle maruf bir tarafı çayır bir tarafı dere bir tarafı Arabacı oğlu Ali tarlası	1	80
Kum tarla demeğle maruf bir tarafı Mihaliç yolu bir tarafı Ali tarlası bir tarafı Köret Osman tarlası	1	40
Turna Bayırı tarlası demeğle maruf bir tarafı Çatal tarlası bir tarafı Çiftlik tarlası bir tarafı çayır	1	100
Fazıli Paşa Çeşmebaşı demeğle maruf bir tarafı Göl bir tarafı Köret Osman tarlası bir tarafı çiftlik	1	300
Keşan çayırı tarlası demeğle maruf bir tarafı İsmail tarlası bir tarafı kabristanlık bir tarafı Uzun Süleyman tarlası	1	300
Karaağaç tarlası demeğle maruf bir tarafı Hacı Kadri tarlası bir tarafı Köret Osman tarlası bir tarafı taşlık	1	500
Çiftlik önünde Kocataş tarlası demeğle maruf bir tarafı Mihaliç yolu bir tarafı Çiftlik dıvarı	1	60
Çiftlik-i hümayun ittisalinde bir kıta tarla	1	32
	10	1772
Çiftlikat-ı hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Mave karibinden Akçeşmeye ondan Deveciçeşmesine ondan Çatalçeşmeye ondan Bayırcataş ağılıyla ondan Gömülke ondan Mahal karyesine ondan Dibeklitaşa ondan Kayseri enreği ondan Öküzboğan ondan Tobserkili ondan Anca Efendi ondan Turna yorunu ondan Akçeşme müntehil olduğu mera		4528
		6300

Mihaliç kazası dahilinde Melde Çiftlik-i Hümayunun arazisi	Kıta	Dönüm
Bir tarafı Çatalçeşme bir tarafı Uluçoklar yolu bir tarafı Bekir ağa tarlası bir tarafı bozalık	1	100
Hacı Hasan oğlu tarlası demeğle maruf bir tarafı Bekir Ağa tarlası bir tarafı Kara Mustafa tarlası	1	150
Çiftlik önünde tarlası bir tarafı İbrahim Ağa tarlası tarafeyni tarik-i 'amm bir tarafı mandıra	1	3
Atilik başında tarlanın bir tarafı bayır bir tarafı kasaba yolu bir tarafı İbrahim Ağa tarlası bir tarafı Mehmed tarlası	1	50
Kasaba yolunda vaki' tarlanın bir tarafı Kalburcu oğlu tarlası bir tarafı İbraihm Ağa tarlası bir tarafı tarik-i 'amm	1	9
Ağıl yeri tarlası demeğle maruf bir tarafı Veli Hüseyin tarlası bir tarafı Yunus Ağa tarlası	1	25
tarlanın bir tarafı çayır üç tarafı tarik-i 'amm	1	10
Eskiköy yeri tarlası demeğle maruf bir tarafı Veli Hüseyin oğlu tarlası bir tarafı Hasan Ağa tarlası bir tarafı İşçi tarlası	1	6
Çayır tarla demeğle maruf bir tarafı Kalburcu halil tarlası bir tarafı çayır bir tarafı tarik-i 'amm	1	10
Kızılca tarla demeğle maruf bir tarafı İbrahim Ağa tarlaıs bir tarafı Kayseri çiftliği	1	210
Şirsez tarlası demeğle maruf bir tarafı Kadın-Peykarı tarlası bir tarafı Sil-deresi bir tarafı Mihaliç caddesi	1	280
Kum tarlası demeğle maruf bir tarafı Mihaliç caddesi bir tarafı Gerdeme yolu bir tarafı Sil deresi	1	250
Ulucaklı tarla demeğle maruf bir tarafı Kara-İbrahim tarlası bir tarafı Kerim oğlu tarlası bir tarafı Yozsalı	1	150
Ulucaklı'da vaki tarlanın bir tarafı Kara-İbrahim tarlası bir tarafı Kabaağaç tarlası bir tarafı Yozbağ oğlu tarlası	1	280
Çatalçeşmede vaki tarlanın bir tarafı tarik-i amm bir tarafı Kara İbrahim tarlası bir tarafı Bozalık	1	300
Boztoprak'da vaki tarlanın bir tarafı Çatalçeşme yolu bir tarafı Bozalık bir tarafı Deveci tarlası	1	90
Akçatahta tarlası demeğle maruf bir tarafı Mihaliç caddeis bir tarafı Gerdeme yolu bir tarafı Sil deresi	1	25
Kırşani başında vaki tarlanın bir tarafı Kara İbrahim tarlası bir tarafı Bozalık tarafeyni merku m İbrahim tarlası	1	25
Kırşani başında vaki tarlanın bir tarafı İbrahim Ağa tarlası bir tarafı Kara İbrahim tarlası bir tarafı Mihaliç yolu	1	30
Naldöğen tarla demeğle maruf bir tarafı tarik-i amm bir tarafı Dere bayırı bir tarafı Naldöğen tarlası	1	220
Karalık tarla demeğle maruf bir tarafı tarik-i amm bir tarafı Çırak Oğlu tarlası bir tarafı Taraklı tarlası	1	15
Ağıl bayırı tarlası demeğle maruf bir tarafı Demir oğlu tarlası bir tarafı Öküzcü tarlası	1	20
Debrecik karyeli Bodur tarlası demeğle maruf bir tarafı Tormik tarlası bir tarafı Deveci-çeşmesi	1	50
Çift yeri tarlası demeğle maruf bir tarafı İbrahim tarlası bir tarafı köy mandrası bir tarafı çayır	1	50
Hızır oğlu ağıl yeri tarlası demeğle maruf bir tarafı çayır bir tarafı kasaba yolu bir tarafı İbrahim Ağa tarlası	1	150

Kara-Burdur tarlası demeğle maruf bir tarafı Derecik bir tarafı Kalburcu tarlası bir tarafı bayır	1	15
	26	2523
Çiftlikat-ı hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Kirmasti kasabasının beri tarafında Taş-Kaldırım başında Azad-Karyesinin öküz çayırına ondan Sazlık ortasında Sırataşlara ondan Sulu-Çayıra ondan Kayseri çiftlik-i hümayunun Harmanlar ondan Kasırca nam mahali ondan Kara Pikare ondan sürü dönyeye ondan Kavaklı karyesi younda İbrahim Ağa çeşmesi ondan İsmail Ağa çayırından Taşlar kaldırım başında müntehi olduğu mera		6000
		8523

Mihaliç Kazası dahilinde Akçasığırlık Çiftlik-i Hümayunu Arazisi	Kıta	Dönüm
Ayazmada vaki tarlanın bir tarafı Nizamcı Halil tarlası bir tarafı çeşme bir tarafı bayır bir tarafı dere	1	200
Han ardında bağçevan mahali demeğle maruf bir tarafı Dişbudak bir tarafı tarik-i amm bir tarafı çiftlik-i mezbur	1	250
Hayırsız nam mahalde vaki tarlanın tarafeyni dere bir tarafı çiftlik-i hümayun tarlası bir tarafı Dişbudak	1	250
		700
Çiftlik-i hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Selam-Almazdan doğru çeşmeye ondan bayır yukarı ondan Cardan Bulgur dönye ondan Koca-Yanak ondan Karalık ondan Dikmelik çeşmeye iskeleye ondan han ardına ondan Karlıhana kadar müstehi olduğu mera		4500
		5200

Kepsut kazası dahilinde çeltik ve saire arazisi	Kıta	Dönüm
Cevizli-Sarma tarlası demeğle maruf bir tarafı İbrahim tarlası bir tarafı Katırcı Oğlu tarlası tarafeyni tarik-i 'amm	1	30
Bonumti tarlası demeğle maruf bir tarafı Hacı Musa oğlu tarlası bir tarafı Moraca oğlu tarlası tarafeyn-i tarik-i amm	1	8
Uzunca çayır tarlası demeğle maruf bir tarafı Kabane oğlu İsmail tarlası bir tarafı Ze'ma tarlası bir tarafı dere yatağı	1	80
İlice/Aylıca tarlası demeğle maruf bir tarafı Hekim oğlu tarlası bir tarafı Odacıklı oğlu tarlası bir tarafı Dede tarlası	1	60
Musa tarlası demeğle maruf bir tarafı İbrahim tarlası bir tarafı Sülüklü-Çeşmesi bir tarafı Salih Paşa oğlu tarlası	1	300
Ova-içi tarlası demeğle maruf bir tarafı Ali tarlası bir tarafı Hekim oğlu tarlası bir tarafı merkum Ali tarlası	1	100
Belek oğlu tarlası demeğle maruf bir tarafı yine Belik oğlu tarlası bir tarafı Yeni-Bağlar tarafeyn-i tarik-i amm	1	100
Ağıl-Yeri tarlası demeğle maruf bir tarafı Çoraklık bir tarafı Sazlı-Orman tarafeyni tarik-i 'amm	1	50
Yılanlı-çayır tarlası demeğle bir tarafı Doğlak/n deresi bir tarafı Çayır-Deresi tarafeyn-i tarik-i amm	1	80
Dutluk-Sarma tarlası demeğle maruf bir tarafı Hekim-Oğlu tarlası bir tarafı Gökman oğlu Melek menzlli	1	20
Salih-Başa oğlu tarlası demeğle maruf bir tarafı dere-yatağı bir tarafı Ali Bey tarlası tarafeyni tarih-i amm	1	14
		842

Kirmasti dahilinde Orta Çifltik-i hümayunun arazisi	Kıta	Dönüm
Çiftlik-i Hümayun altında sebze-bağçesinin bir tarafı bağçıvan-odaları tarafeyni yol bir tarafı arpalık	1	25
Arpalık nam tarlanın bir tarafı sebze bağçesi bir tarafı yol bir tarafı manıra deresi bir tarafı çiftlik-i mezkurun harem-konakları	1	100
Çavuş-Çeşmesinde vaki' tarlanın bir tarafı yol tarafeyni Koca-Bayır bir tarafı dere	1	40
Karaçalı ocaklığı nam mahalde vaki' tarlanın bir tarafı sazlık tarafeyni çayırlık bir tarafı Mihaliç yolu	1	1066
Bağçe-altında tarlanın bir tarafı çayır tarafeyni arpalık	1	8
Cevizli dere nam mahalde vaki' tarlanın bir tarafı Kirmasti yolu bir tarafı zeytünlük deresi bir tarafı Ceviz dere bayırı	1	100
Koyun-Kışlağı nam mevzi'de vaki' tarlanın bir tarafı Koca-Yolu bir tarafı Sarı-Mişelik bir tarafı Taş-Ağıl	1	100
Kınarca altında vaki' tarlanın bir tarafı yol tarafeyni çayır bir tarafı sazlık	1	130
Küçük-Boyalık nam tarlalar bir tarafı Azmak bir tarafı Gönü-Karyesi yolu bir tarafı kör yol	1	100
Büyük-Boyalık nam tarlanın bir tarafı Hacı-Kıbağı tarlası bir tarafı İstece Bey oğlu trlası bir tarafı Tormik karyesi yolu	1	1000
defa Boyalık tarlanın bir tarafı Koca-Yolu tarafeyni çayır bir tarafı sazlık	1	600
Eski/İnesgi oğlu nam mahalde vaki' tarlanın bir tarafı Büyük-Kınarca bir tarafı bayır tarafı Deveci karyesi	1	60
Bir kıta tarlanın bir tarafı Koca-Yolu bir tarafı Büyük Kınarca bir tarafı Mihaliç yolu bir tarafı Büyük- Taş-Ağılı	1	60
Küçük-Kınarca nam mahalde vaki' tarlanın bir tarafı Garkalık bir tarafı Kınarca tarafeyni Koca-Yolu	1	100
	14	3489
Çiftlik-i hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Veli-Oğlan nam bayırın tebesinden Taş-Kesbeki nam mahale ondan Çavuş-Çeşmesine ondan Bucaklı karyesinden Hacı Ahmed Oğlu Hüseyinin tarlasına ondan Bucaklı karyesinin kabristanı ondan Gönü karyesine giden yol üzerinde Hacı Kabagi tarlasına ondan Tormatar karyesine giden yolda Savb/Sob-Ağrıılar nam mahale ondan sıra-taşlara ondan Tormatari karyesinden kasaba yoluna Varid-Karanim Saat mikdarı yolca gidüb Gokalızda mevcud sınurda Aktaş ve Karataş ondan yoldan sağ tarafına 'avdet idüb Büyük-Göl sazlığı derununda sınur-taşlarına ondan Şimşir-Çayırlarına ondan Dovaca karyesinden Mihaliçe giden yola ondan Palasotti tarlasına ondan kasaba yolunca Büyük-Kınarca'ya ondan Kumanya-Deresinin Veli-Oğlan bayırına kadar müstehi olduğu mera		6500
		9989

Mihaliç kazası dahilinde canbazlı Çifltik-i Hümayunun arazisi	Kıta	Dönüm
Babaz-oğlu tarlası demeğle maruf bir tarafı Subaşı oğlu Yolu bir tarafı bayır-yolu bir tarafı Makar yolu	1	30
Erkek-Ceviz yeri demeğle maruf bir tarafı Salzi/Salki oğlu tarlası bir tarafı Süleyman tarlası bir tarafı Mustafa oğlu tarlası	1	5
Gelisa/Kilisa deresi tarlası demeğle maruf bir tarafı Süleyman tarlası bir tarafı Salki/Salzi oğlu tarlası bir tarafı Eşram tarlası	1	1
Yakacık tarlası demeğle maruf bir tarafı Termini/Müteremni tarlası tarafeyni yol bir tarafı dere mahali	1	5
Musalla tarlası demeğle maruf bir tarafı Koşma-Halil tarlası bir tarafı Tanaş tarlası bir tarafı yol	1	11
Eğri-Ahlat tarla demeğle maruf bir tarafı Süleyman tarlası bir tarafı Koş-Kavaş oğlu Halil tarlası	1	10
Ceviz tarlası demeğle maruf bir tarafı Uzun-Kastizi tarlası bir tarafı Memeş tarlası bir tarafı Süleyman tarlası	1	9
Medazlık tarlası demeğle maruf bir tarafı Süleyman tarlası bir tarafı Harko oğlu tarlası bir tarafı dere mahali	1	5
Tana yeri tarlası demeğle maruf bir tarafı Aleksi tarlası bir tarafı dere bir tarafı Süleyman tarlası	1	80
Orta-Yüz tarlası demeğle maruf bir tarafı Andirye tarlası bir tarafı Yevan oğlu tarlası bir tarafı Esnad tarlası	1	100
Koğalık tarlası demeğle maruf bir tarafı yol bir tarafı Esnad oğlu tarlası bir tarafı Yapaz bir tarafı Südlü-Hendek	1	134
Saz-Peykar tarlası demeğle maruf bir tarafı Südlü-Hendek bir tarafı Balkır oğlu tarlası bir tarafı bayır	1	610
Koca-Çayır ve Çeşme-Başı tarlası demeğle maruf bir tarafı Koca-Çayır bir tarafı Sarı-Nikola bir tarafı bayır bir tarafı Azman	1	10
Kaba tarla demeğle maruf bir tarafı Tanaş bir tarafı İlvan oğlu bir tarafı Çeşme bir tarafı bayır	1	6
Kaba-Boğazı tarla demeğle maruf bir tarafı Kara-Dimitri bir tarafı Kara-Güz bir tarafı dere bir tarafı Panayoda tarlası	1	34
Kara-Ağaç tarla demeğle maruf bir tarafı Karaman-Kuri bi tarafı Kırçıl-Oğlu Kastizi tarla	1	40
Boz-tarla demeğle maruf bir tarafı Azmak bir tarafı dere bir tarafı Balkir bir tarafı Balkir Oğlu bir tarafı Kara-Yani tarlası	1	2
Hacı Ali Bezi tarlası demeğle maruf bir tarafı Aleksi bir tarafı Aksaç tarlası bir tarafı dere bir tarafı hendek	1	6
Koca-Yanak tarlası demeğle maruf bir tarafı Süleyman tarlası bir tarafı dere bir tarafı Nikola tarlası	1	8
Kara-Ağaç tarla demeğle maruf bir tarafı Aleksi tarlası bir tarafı dere bir tarafı yol bir tarafı Elekli tarlası	1	60
Çardak-yeri demeğle maruf bir tarafı Azmak bir tarafı çayır bir tarafı Yevan oğlu tarlası	1	15
Kızıl-tarla demeğle maruf bir tarafı Yevan-Oğlu tarlası bir tarafı Saçlı-Çalı	1	15
Kızıl-Yaraçma tarlası demeğle maruf bir tarafı Aleksi bir tarafı bir tarafı Mustafa Oğlu Memeş tarlası bir tarafı hendek-başı	1	60
Dış-Budak tarla demeğle maruf bir tarafı Süleyman tarlası bir tarafı yol bir tarafı hendek	1	100
Mahmud Bey tarlası demeğle maruf bir tarafı Süleyman tarlası bir tarafı Balta tarlası	1	5
Bodraltı tarla demeğle maruf bir tarafı dere-köylü bir tarafı Aleksi tarlası bir tarafı bayır bir tarafı hendek	1	15
Dış-Budak tarla demeğle maruf bir tarafı Dere-Köy bir tarafı Dimitri bir tarafı Kel-yani tarla	1	8
Uzun-Alan tarla demeğle maruf bir tarafı Şay/Şey bir tarafı Azmak bir tarafı Anastaş tarlası bir tarafı dere	1	50
Eğer-Sürgüd tarlası demeğle maruf bir tarafı dere bir tarafı Azmak bir tarafı Uzun-Tanaş	1	10
Dolma-Önü tarlası demeğle maruf bir tarafı Ceviz bir tarafı dere yol	1	10
Koca-Yüz tarlası demeğle maruf bir tarafı hendek bir tarafı Süleyman tarlası	1	90
Ali-Ağa yeri demeğle maruf bir tarafı dere-köy bir tarafı Toplu-Vasil tarlası bir tarafı bayır bir tarafı hendek	1	10
Değirmen-Önü demeğle maruf bir tarafı Papas-tarlası bir tarafı Kara-Dimitri tarlası bir tarafı yol bir tarafı Azmak	1	20
Kaba- tarla demeğle maruf bir tarafı değirmen tarlası bir tarafı Koca-Bey oğlu tarlası	1	6
Kızıl-Beri-Baş demeğle maruf bir tarafı Ebram tarlası ve üç tarafı Azmak	1	6
Süküd-Peykarı demeğle maruf bir tarafı Süleyman tarlası bir tarafı Azmak bir tarafı Koş/Kavis oğlu tarlası	1	6

Mihaliç yolu tarlası demeğle maruf bir tarafı Süleyman tarlası bir tarafı yol bir tarafı hendek	1	3
bir kıta tarlanın bir tarafı Memeş bir tarafı Zimmi bir tarafı Koş/Kavaş oğlu Halil tarlası	1	8
		1203

Mihaliç kazası dahilinde vaki' Kaba-Ağaç çiftlik-i hümayunun arazisi	Kıta	Dönüm
Terazi-Başı nam mahalde vaki' tarlanın bir tarafı Gerdeme yolu bir tarafı Devine yolu bir tarafı Sığır-Yolu	1	600
Çiftlik-i hümayun altınd Pulluk tarla demeğle maruf bir tarafı Mihaliç yolu ve Seyl/Sil Köyü yolu	1	300
Yine çiftlik-i hümayunun altında tarlanın bir tarafı Vasil-Köyü yolu bir tarafı Azmak bir tarafı bağçe bir tarafı tarik	1	250
Yine çiftlik-i hümayun altında tarlanın bir tarafı bağçe bir tarafı Azmak yolu bir tarafı Govanlık bir tarafı Kirmasti yolu	1	400
Arpalık nam tarlanın bir tarafı çiftlik-i hümayun bir tarafı koca-caddesini bir tarafı çiftlik-i mezbur	1	200
Evyük tarla demeğle maruf bir tarafı Büyük tarla bir tarafı Ağıl-yolu deresi bir tarafı mer'a	1	300
	6	2050
çiftlik-i hümayun-ı mezburun müstakilen havi olduğu merasının bir tarafı Mihaliçden Gerdemeye giden yol üzerinde vaki' Büyük Terazi'den Gün-Doğrısına doğru Kara-Koğalık ondan Çürekli çiftliği sınurunca Mermere-kabristanına ondan Mihaliçden Kirmastiye giden cadde ile giderek sınır-taşına ondan Vasil karyesi Kayseri çiftlik-i hümayun sınırında Dikili-mermertaşa ondan Kevamlik nam mahalden Koyun-ağılına ondan iki bayır arasında Taş-Ağıl nam mevzi'e ondan bayırca çeşme-başı nam mahale ondan kasabadan Dönbe karyesine giden yolca gidüb Germe caddesiyle terazi-başında müntehi olduğu mera		4000
		6050

Source: BOA. *HH.d.616*, 84-87

Table B4. Distribution of Fields by Plot and Area in *dönüm* in each Individual Landed Estate

	<49		50<x<99		100<x<149		150<x<199		200<x<299		300<x<499		500<x			
	# of plots	Area in *dönüm*	# of plots	Area in *dönüm*	# of plots	Area in *dönüm*	# of plots	Area in *dönüm*	# of plots	Area in *dönüm*	# of plots	Area in *dönüm*	# of plots	Area in *dönüm*	Total Plots	Total Area
Çörekli	9	176	2	130			1	150	5	1055	4	1590	1	525	22	3626
Big and Small Gerdeme	4	105	5	310	4	420	1	150	3	600	2	700	5	4400	24	6685
Gönü	1	12	3	170	4	440			1	200					9	822
Kayseri	2	72	3	200	1	100					3	900	1	500	10	1772
Melde	12	193	4	240	1	100	3	450	5	1240	1	300			26	2523
Akçasığırlık									3	700					3	700
Kepsut	4	72	4	270	2	200					1	300			11	842
Orta	3	73	2	120	6	630							3	2666	14	3489
Canbazlı	29	319	5	340	3	334							1	610	38	1603
Kabağaç									2	450	3	1000	1	600	6	2050
Sub-Totals	64	1022	28	1780	21	2224	5	750	19	4245	14	4790	12	9301	163	24112

Source**:** Based on the transliterated archival documents given above (BOA. *HH.d 616*, 84-87).

Table B5. Percentage Distribution of Fields by Plot and Area for each Individual Landed Estate

	<49		50<x<99		100<x<149		150<x<199		200<x<299		300<x<499		500<x	
	% in Total Plots	% in Total Area	% in Total Plots	% in Total Area	% in Total Plots	% in Total Area	% in Total Plots	% in Total Area	% in Total Plots	% in Total Area	% in Total Plots	% in Total Area	% in Total Plots	% in Total Area
Çörekli	40.91	4.85	9.09	3.59	0.00	0.00	4.55	4.14	22.73	29.10	18.18	43.85	4.55	14.48
Big and Small Gerdeme	16.67	1.57	20.83	4.64	16.67	6.28	4.17	2.24	12.50	8.98	8.33	10.47	20.83	65.82
Gönü	11.11	1.46	33.33	20.68	44.44	53.53	0.00	0.00	11.11	24.33	0.00	0.00	0.00	0.00
Kayseri	20.00	4.06	30.00	11.29	10.00	5.64	0.00	0.00	0.00	0.00	30/00	50.79	10.00	28.22
Melde	46.15	7.65	15.38	9.51	3.85	3.96	11.54	17.84	19.23	49.15	3.85	11.89	0.00	0.00
Akçasığırlık	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	0.00	0.00	0.00	0.00
Kepsut	36.36	8.55	36.36	32.07	18.18	23.75	0.00	0.00	0.00	0.00	9.09	35.63	0.00	0.00
Orta	21.43	2.09	14.29	3.44	42.86	18.06	0.00	0.00	0.00	0.00	0.00	0.00	21.43	76.41
Canbazlı	76.32	19.90	13.16	21.21	7.89	20.84	0.00	0.00	0.00	0.00	0.00	0.00	2.63	38.05
Kabağaç	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	21.95	50.00	48.78	16.67	29.27

Source**:** Based on the transcripted archival documents given above (BOA. *HH.d 616*, 84-87)

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