

**FOREST AND THE STATE: HISTORY OF FORESTRY AND FOREST
ADMINISTRATION IN THE OTTOMAN EMPIRE**

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**FOREST AND THE STATE: HISTORY OF FORESTRY AND FOREST
ADMINISTRATION IN THE OTTOMAN EMPIRE**

by
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Submitted in partial fulfillment of the requirements
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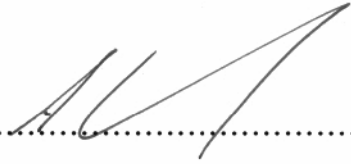
Sabancı University
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FOREST AND THE STATE: HISTORY OF FORESTRY AND FOREST
ADMINISTRATION IN THE OTTOMAN EMPIRE

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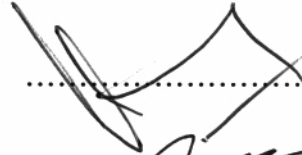


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ABSTRACT

FOREST AND THE STATE: HISTORY OF FORESTRY AND FOREST ADMINISTRATION IN THE OTTOMAN EMPIRE

Dursun, Selçuk

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This dissertation is on the history of forestry and forest administration in the Ottoman Empire from the fifteenth to the early twentieth century, though major part of it is devoted to the nineteenth-century, when forestry was considered a science in and of itself, and the forest came to be seen as a source of wealth, if properly managed and regulated. By discussing the development of rational forestry in the Ottoman Empire, this dissertation aims to show relational patterns of economic, administrative, political, legal, and environmental aspects of Ottoman society. In other words, this dissertation seeks to document and analyze the emergence of rational forest management, the administrative and institutional developments that accompanied it, the process of forest-related codification and the limits to forest management and administration. The forestry practices and policies in the Ottoman Empire manifest that rational forest management, or scientific forestry, could develop in a dominantly agrarian setting, where industrial and technological progress was only in the making. This dissertation argues that the inherent limits and weaknesses of the Ottoman modern statemaking, wrongly equated with ‘centralization’, had a direct impact on the development of forestry. This was a process through which the Ottoman state gradually lost its capacity to control its forests while trying to have firmer grip on them.

Keywords: Forestry, forestry policies, land tenure, property, trade

ÖZET

ORMAN VE DEVLET: OSMANLI İMPARATORLUĞU'NDA ORMANCILIĞIN VE ORMAN İDARESİNİN TARİHİ

Dursun, Selçuk

Doktora, Tarih

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Bu doktora tezinin büyük kısmı ormancılığın doğası gereği bilim seviyesine terfi ettiği ve önemli bir gelir kaynağı olarak kabul edildiği 19. yüzyıla ayrılmasına karşın, 15. ve erken 20. yüzyılları arasında Osmanlı İmparatorluğu'nda ormancılığın ve orman idaresinin tarihi üstünedir. Osmanlı İmparatorluğu'nda rasyonel ormancılığın tarihsel gelişimini tartışırken, iktisadi, idari, siyasi, hukuki ve çevresel koşullar arasındaki ilişkiyel örüntüleri göstermeyi amaçlamaktadır. Başka bir deyişle, bu tez rasyonel orman idaresinin ortaya çıkışını, buna eşlik eden idari ve kurumsal gelişmeleri, ormanlara ilişkin kanunlaştırma süreçlerini/etkinliklerini ve orman idaresinin ve işletmeciliğinin kısıtlılıklarını belgelemeye ve çözümlenmeye çalışmaktadır. Osmanlı İmparatorluğu'nda ormancılık uygulamaları ve politikaları, endüstriyel ve teknolojik gelişmenin henüz teşekkül aşamasında olduğu tarımsal bir ortamda da rasyonel orman işletmeciliğinin, ya da bilimsel ormancılığın, gelişebileceğini açıkça gösterir. Bu tez, yanlış bir şekilde 'merkezileşme'yle eş tutulan Osmanlı modern devletinin oluşumu sürecindeki kısıtlılıkların ve eksikliklerin ormancılığın gelişmesinde doğrudan bir etkisi olduğunu iddia etmektedir. Osmanlı devletinin, ormanları daha sağlam bir biçimde egemenliği altına almak isteğine karşın kontrol kabiliyetini tedricen kaybettiği bu süreç, çalışma boyunca Osmanlı modern devletinin oluşumu ile eşzamanlı olarak incelenmektedir.

Anahtar sözcükler: Ormancılık, ormancılık politikaları, toprak rejimi, mülkiyet, ticaret

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LIST OF ABBREVIATIONS

Abbreviations of Institutions, Books, and Documents

A. AMD.	BEO Amedi Kalemi
A. DVN.	BEO Divan-1 Hümayun Kalemi
A. DVN. DVE.	BEO Divan-1 Hümayun Kalemi-Düvel-i Ecnebiyye
A. DVN. MHM.	BEO Divan-1 Hümayun Mühimme Kalemi
A. MKT.	BEO Sadaret Evrakı Mektubi Kalemi
A. MKT. DV.	BEO Sadaret Evrakı Mektubi Kalemi-Deavi
A. MKT. MHM.	BEO Sadaret Evrakı Mektubi Mühimme Kalemi
A. MKT. MVL.	BEO Sadaret Evrakı Mektubi Mühimme-Meclis-i Vala
A. MKT. NZD.	BEO Sadaret Evrakı Mektubi Kalemi-Nezaret ve Devair
A. MKT. ŞD.	BEO Sadaret Evrakı Mektubi Kalemi-Şura-yı Devlet
A. MKT. UM.	BEO Sadaret Evrakı Mektubi Kalemi-Umum Vilayat
BEO	Bab-1 Ali Evrak Odası
BOA	Başbakanlık Osmanlı Arşivi
C. ASK.	Cevdet Askeri
C. BEL.	Cevdet Belediye
C. İKT.	Cevdet İktisat
DH. EUM. ADL.	Dahiliye Nezareti Takibat-1 Adliye Kalemi
DH. EUM. THR.	Dahiliye Nezareti Tahrirat Kalemi
DH. MKT.	Dahiliye Nezareti Mektubi Kalemi
HH.	Hatt-1 Hümayun
HK	Halil Kutluk, <i>Türkiye Ormancılığı ile İlgili Tarihi Vesikalar</i>
HR. MKT.	Hariciye Nezareti Mektubi Kalemi
I. DH.	İrade, Dahiliye
I. HR.	İrade, Hariciye
I. MM.	İrade, Meclis-i Mahsus

IAD.	İstanbul Ahkam Defterleri
MD.	Mühimme Defterleri
MMI.	İrade, Mesail-i Mühimme
ŞD.	İrade, Şura-yı Devlet
T. OMI.	Ticaret, Nafia, Ziraat, Orman Meadin Nezareti
Y. A. HUS.	Yıldız Sadaret Hususi Maruzat Evrakı
Y. A. RES.	Yıldız Sadaret Resmi Maruzat Evrakı
Y. EE.	Yıldız Esas Evrakı
Y. MTV.	Yıldız Mütenevvî Maruzat Evrakı
Y. PRK. A.	Yıldız Sadaret Maruzatı
Y. PRK. BŞK.	Yıldız Mabeyn Başkitabeti
Y. PRK. OMZ.	Yıldız Orman, Meadin ve Ziraat Nezareti Maruzatı

Abbreviations of Hicrî and Rumî Months and Days

M	Muharrem
S	Safer
Ra	Rebiyyü'l-evvel
R	Rebiyyü'l-ahir
Ca	Cumade'l-ula
C	Cumade'l-ahir
B	Receb
Ş	Şa'ban
N	Ramazan
L	Şevval
Za	Zi'l-kade
Z	Zi'l-hicce
El.	Eva'il
Et.	Evasıt
Er.	Evahir
Ka	Kanun-i evvel
K	Kanun-i sani
Ta	Teşrin-i evvel
T	Teşrin-i sani

NOTE ON TRANSLITERATION

Modern Turkish orthography is used to transliterate Ottoman Turkish words, regardless of their origin. Diacritical marks are used to indicate only *ayns* (‘) and *hemzes* (’). For some well-known place names, English versions are used in spellings (such as ‘Aleppo,’ ‘Lebanon,’ ‘Beirut’ and the like), though there are exceptions to the usage. For the names of institutions, titles, and concepts both the English and Ottoman Turkish equivalents are given.

INTRODUCTION

This dissertation aims to illustrate the interplay of the economic, administrative, political, legal, and environmental processes within the context of the development of forestry and forest administration in the late Ottoman Empire. In other words, this dissertation seeks to document and analyze the emergence of rational forest management and the concomitant administrative and institutional developments, the process of forest-related codification and the limits to forest management and administration. The dissertation concentrates mainly upon nineteenth-century developments, though with an eye to the long-term historical processes of forestry and the history of the relationship between the state and the forest in the Ottoman Empire.

It is widely accepted in the scholarly literature on rational forest management that the latter was an innovation of the modern state coinciding with the first phase of the Industrial Revolution. However, scientific forestry did not follow the same trajectory or exhibit uniformity in the various places and contexts where it developed.¹ Practices and policies varied even within Europe and her colonies. In short, contrary to claims commonly made in the historiography of modern state making in Europe, there is no direct correlation between industrialization and rational forest management. Questioning this correlation requires a comparative focus on the networks and interactions valid for this particular phenomenon in different spatial contexts. For instance, forestry practices and policies in the Ottoman Empire (though perhaps an exceptional case) illustrate that rational forest

¹ Peter Vandergeest and Nancy Lee Peluso, "Empires of Forestry: Professional Forestry and State Power in Southeast Asia, Part 1," *Environment and History* 12, no. 1 (February 2006).

management, or scientific forestry, could develop in a dominantly agrarian setting, in which industrial and technological progress was only in the making.

‘Uniqueness’, ‘exceptionalism’, ‘divergence’, ‘rise’, ‘superiority’ and the like have been the catchwords of historiographical discussions in the historiography of the rise of capitalism and the Industrial Revolution.² Some historians also identify a distinctive and particular European path in the environmental history of the world by pointing to two institutions, namely the long-term tradition of *Verrechtlichung* (regulation by law), which provided individuals a ground for resisting the state and the widespread institution of private property.³ Highlighting the distinctiveness of the European modern state, often characterized—in the footsteps of Max Weber—by the development of rational law and bureaucracy is another way in which the particularities of the West are sometimes stressed. However, Radkau admits that the institution of private property might not have been a success story from an environmental point of view as the property and inheritance rights could be so well established in subsistence economies that the productivity of the soil maintain more effectively.⁴ Moreover, if we consider

² John A. Hall, *Powers and Liberties: The Causes and Consequences of the Rise of the West* (New York: Oxford University Press, 1986); Eric L. Jones, *The European Miracle: Environments, Economies, and Geopolitics in the History of Europe and Asia*, 2nd ed. (Cambridge and New York: Cambridge University Press, 1987); Eric L. Jones, *Growth Recurring: Economic Change in World History* (Oxford: Clarendon Press, 1988); David S. Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor* (London: Little Brown and Company, 1998); Michael Mann, *The Sources of Social Power*, vol. II (Cambridge: Cambridge University Press, 1993); Douglass C. and Robert Paul Thomas North, *The Rise of the Western World: A New Economic History* (Cambridge: Cambridge University Press, 1973); Kenneth Pomeranz, *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton: Princeton University Press, 2000).

³ Joachim Radkau, “Exceptionalism in European Environmental History,” *GHI Bulletin*, no. 33 (2003). This viewpoint is strongly influenced by the works of new institutionalists. For the role of property rights and their foundation in institutions, especially see: Douglas C. North, *Structure and Change in Economic History* (New York: W. W. Norton, 1981).

⁴ Radkau, “Exceptionalism,” p. 27.

rational law and bureaucracy in quantitative terms, it is clear that the Ottoman state as well as many other powers experienced a similar quantitative growth, especially in the nineteenth century.

Liberalist and neoliberalist arguments, on the other hand, consider the “self-regulating market” to be the central element of nineteenth century economic development. Central to this thesis is the assumption that a well-regulated market can create the mechanisms necessary for allocating goods and services on its own, i.e. without the interference of the state, if private initiative and commodification of resources are not hindered.⁵ In other words, the state should create and protect private property rights and commodification of resources.⁶

There is also an implicit argument in both liberalist and institutionalist accounts of industrial development whereby the state is held responsible for maintaining property rights as a precondition of a market economy. This argument thus implies that if private property rights are not developed enough to create market activity in a particular spatio-economic context, then economic development is unlikely to occur. However, when applied to the ownership rights of forests in the nineteenth century, this approach is highly problematic. Unlike in the case of agricultural land, in which private ownership was considered a necessary precondition for increasing production, state ownership was generally favored for

⁵ James McCarthy and Scott Prudham, “Neoliberal Nature and the Nature of Neoliberalism,” *Geoforum* 35, no. 3 (2004): p. 276. For a critique of the idea of “self-regulating market” in the nineteenth century, see: Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 1944). For a couple of variations on Polanyi’s concept of “double movement” (market liberalization vs. responses) in relation to contemporary neoliberal projects, see the special issue of *Geoforum* on “Neoliberal Nature and the Nature of Neoliberalism,” vol. 35, no. 3 (May 2004), pp. 269-393.

⁶ For a critique of this approach, see: Bob Jessop, *The Future of the Capitalist State* (Cambridge and Oxford: Polity, 2002).

forests.⁷ This is clearly seen in nineteenth century discussions about scientific management of forests.

The common approach to relationships between the state and the peasantry in environmental historiography portrays the former as an autonomous actor that usually restricts the latter's access rights to public forests by imposing rules and regulations. During the past two decades, many studies on Eurasian and African history have addressed these types of conflicts and contestations between central governments and local people within the context of colonialism and imperialism as historical processes.⁸ Focusing solely upon the peasantry versus the state, however, ignores many crucial alliances among different actors that could be revealed by an alternative, and ultimately more fruitful approach that would seek to illuminate the autonomy and capacities of state and other relevant actors in the drama.

Scholars previously focused upon the question of ownership when addressing the relationship between forest use and local customary traditions. This literature centered upon the question of whether local people were the agents of deforestation or the protectors of forests. The concept of 'tragedy of the commons' plays a pivotal role in this debate.⁹ According to this concept, users of common property (those resources which are not privately owned) generally act in their own self-interest and when not regulated acquire wealth at the expense of other groups. Hardin points out that everyone has an interest in exploiting common resources like grazing lands, fish stocks, and forests. The sum total of these individual actions

⁷ Haripriya Rangan, *Of Myths and Movements: Rewriting Chipko into Himalayan History* (London and New York: Verso, 2000), p. 111.

⁸ The main examples would be the works of subaltern scholars that multiplied after the peasant protests (the Chipko movement) against the India's Forest Bill of 1982, which limited peasants access to and increased state's control over public forests. For example, see: Ramachandra Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*, expanded ed. (Berkeley: University of California Press, 2000). For a reevaluation of this literature, see: Rangan, *Of Myths and Movements*.

⁹ Garrett Hardin, "The Tragedy of the Commons," *Science*, no. 162 (1968).

ultimately results in the degradation and destruction of the common environmental and economic resources.¹⁰ Some proponents of this argument hold that common property resources should be parceled and reallocated as private property in order to improve management of them. Others, however, argue that all natural resources should be state-controlled so as to ensure better their preservation.¹¹ According to yet another view, neither the state nor the free market, nor private property, is uniformly successful in enabling individuals to sustain long-term, productive use of natural resource systems.¹² However, it is now accepted that what Hardin termed ‘the commons’ were in fact “‘free or open access resources’ which were not subject to management or ‘property’ rights at all.”¹³

One category of the pre-industrial forest in the Ottoman Empire, the *cibal-i mubaha*, was among such ‘commons’, over which the public enjoyed, at least in theory, equal rights. However, the prevailing system of classification and the categories of perception shaped the vision of those conducting research on forests

¹⁰ Ibid. For an evaluation of other examples in similar fashion, see: Jeffrey Longhofer, “Specifying the Commons: Mennonites, Intensive Agriculture, and Landlessness in Nineteenth-Century Russia,” *Ethnohistory* 40, no. 3 (1993).

¹¹ One can also argue that the commercial interests of the state, which considered forests and woodlands to be economic objects, were employed as instruments of domination used to exploit forests and the interests of local people via a “scientific” agenda. However, both of these approaches are simplistic and potentially misleading. Even in its initial phase, German scientific forestry, and presumably the latecomers also, took over existing methods and practices prevalent among local forest communities. Ravi Rajan, “Imperial Environmentalism or Environmental Imperialism? European Forestry, Colonial Foresters and the Agendas of Forest Management in British India 1800-1900,” in *Nature and the Orient: The Environmental History of South and Southeast Asia*, ed. Richard H. Grove, Vinita Damodaran, and Satpal Sangwan (Delhi: Oxford University Press, 1998), p. 328.

¹² Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge and New York: Cambridge University Press, 1990).

¹³ Rebeca Leonard and Judy Longbottom, *Land Tenure Lexicon: A Glossary of Terms from English and French Speaking West Africa* (London: International Institute for Environment and Development, 2000), p. 16.

in the pre-industrial age, at which time, unlike in the nineteenth and twentieth century, forests were not yet controlled and used by the state. Thus, the pre-industrial forest regime was described as “a period of unlimited exploitation;” “a period of loose control;” “a period of forest destructions,” etc.¹⁴ This approach projected the category of state property as it was perceived in the 1930s onto a period in which state and common property were defined differently. In brief, the authors in question viewed state ownership as a norm rather than a form.¹⁵

Because forest lands were not strictly controlled by the state in the pre-industrial period, the historians of the Ottoman Empire overlook the socioeconomic importance of forests for the state and society. This is even the case for historians of the nineteenth century when the Ottoman state came to consider its forests an important source of wealth, and began treating them as examples of ‘good administration’ and ‘proper management.’¹⁶ The main reason underlying this

¹⁴ Even an author takes this view to its extreme by attributing the collapse of the Roman, Byzantine, Seljukid, and Ottoman Empires to their neglect of forests. He claims that just as the Roman Empire depleted the central Anatolian forests; the Byzantines, the Seljukids, and finally the Ottomans paved the way to their own destruction by destroying the rich forests of Anatolia. For him, the deforestation in the Ottoman Empire occurred because of the “dynastic ignorance” and the “greed of merchants,” both of which resulted in the destruction of vast forests. He also criticized the cosmopolitan structure of the empire and the capitulations granted to foreign powers as factors that kept the state from developing a national economy. Niyazi Acun, *Ormanlarımız ve Cumhuriyet Hükümeti'nin Orman Davası* (Ankara: 1945), pp. 1-4.

¹⁵ For an analysis of early Republican perceptions of the state in Turkish historiography and their retrospective projections upon the ‘long’ history of the Ottoman past, see: Halil Bertay, “The Search for the Peasant in Western and Turkish History/Historiography,” in *New Approaches to State and Peasant in Ottoman History*, ed. Halil Bertay and Suraiya Faroqhi (London: Frank Cass, 1992).

¹⁶ Among the various works of the doyens of Ottoman historiography, there is not a single article specifically devoted to forest history. Those written by non-professionals meanwhile are ideologically and methodologically deficient. Most of the latter writers were professional foresters, although a few were lawyers or legal scholars. There is only one study devoted specifically to the pre-Tanzimat forest regime, but unfortunately its author failed to rise above the deficient and incorrect premises of established views. Bekir Koç, “Osmanlı Devleti’ndeki Orman ve

neglect is the fact that economic, social, and agricultural studies concentrate almost exclusively upon the urban and arable parts of the landscape, thus ignoring forests, pastures, and mountains.¹⁷ However, it should be noted that the 1930s did witness a series of discussions about the beginnings of modern forestry in the Ottoman Empire.

Some have argued that modern scientific forestry began only with the Republican period,¹⁸ while others have rejected this idea and stated that it was introduced after the Crimean War.¹⁹ In fact, neither of these arguments is accurate, since the Ottoman government made an early effort to set up a kind of ‘rational’ forest management immediately after the proclamation of the Tanzimat Edict, as early as 1840. Although this attempt was short-lived and ultimately unsuccessful, successive endeavors until 1857, when a forestry school was established for the first time, paved the way for the implementation of scientific forestry.²⁰ Late

Koruların Tasarruf Yöntemleri ve İdarelerine İlişkin Bir Araştırma,” *OTAM* 10 (1999).

¹⁷ For a similar critique of the environmental history of the South and Southeast Asia in this regard, see the “Introduction” by the editors of the book: Richard Grove, Vinita Damodaran, and Satpal Sangwan, eds., *Nature and the Orient: The Environmental History of South and Southeast Asia* (Delhi and New York: Oxford University Press, 1998).

¹⁸ Acun, *Ormanlarımız*; Franz Heske, *Türkiyede Orman ve Ormancılık [Wald Und Forstwirtschaft in Der Türkei]*, trans. Selâhattin İnal, İstanbul Üniversitesi Edebiyat Fakültesi Coğrafya Enstitüsü Yayını, No. 14 (İstanbul: Hüsnütabiat Basımevi, 1952); Selâhattin İnal, *Vorträge über die Türkische Forstwirtschaft, Gehalten in Deutschland [Türkiye Ormancılığı Hakkında Almanya’da Verilen Konferanslar]* (İstanbul: İ. Ü. Orman Fakültesi Yayınları, 1962).

¹⁹ Ali Kemal Yiğitoğlu, *Türkiye’de Ormancılığın Temelleri, Şartları ve Kuruluşu* (Ankara: Yüksek Ziraat Enstitüsü, 1936). [Louis A.] A. Bricogne, *Türkiyede Ormancılık Heyeti*, trans. Fahri Bük (Ankara: T. C. Ziraat Vekâleti, 1940 [c. 1877]). Kerim Yund, “100 Yıllık Türk Ormancılık Öğretimine Bakış,” in *Türk Ormancılığı Yüzüncü Tedris Yılına Girerken, 1857-1957* (Ankara: Türkiye Ormancılar Cemiyeti, 1957). *Türk Ziraat Tarihine Bir Bakış*, Birinci Köy ve Ziraat Kalkınma Kongresi Yayını (İstanbul: Devlet Basımevi, 1938).

²⁰ For example, one of the French forest specialists in the Ottoman Empire, A. Bricogne, states that modern scientific forestry began after the signing of the Paris

imperial and early republican sources neglect the developments in forestry before the Crimean War, even though by this time the naval and local demands and the provisioning of urban centers had become decisive factors for the state's forest policy.

The early generation of 'forest historians' consisted primarily of active or retired professional foresters educated in the Ottoman or Turkish forestry schools. They produced most of their works before the Second World War. Their perspectives on Ottoman and Turkish forestry have not yet been seriously questioned in Turkish historiography. This shortcoming is mainly caused by the acceptance of dominant perspectives in conventional forest historiography, which are based on a sharp distinction between nature and culture. This paradigm of early forestry studies structured individual historiographies around this distinction, also known as the "universal tendency."²¹ In the case of Ottoman-Turkish forest historiography, we see the same distinction concurrently supported by an 'organic' view of nature and culture.²²

Treaty in 1856, when the Ottoman government carried out radical reforms in administration to exploit its valuable natural resources, including forests, in order to demonstrate that the Empire was part of 'civilized' Europe. Bricogne, *Ormançılık Heyeti*, p. 3.

²¹ M. Williams, "Putting 'Flesh on the Carbon-Based Bones' of Forest History," in *Methods and Approaches in Forest History*, ed. M. Agnoletti and S. Anderson (Wallingford, Oxon, UK and New York, NY, USA: CABI Pub. in association with the International Union of Forestry Research Organizations (IUFRO), 2000), p. 35. For a brief analysis of the relationship between nature and culture from the Classical period until the eighteenth century, see: Clarence J. Glacken, "Reflections on the History of Western Attitudes to Nature," in *In Nature and Identity in Cross-Cultural Perspective*, ed. Anne Buttimer and Luke Wallin (Dordrecht, Boston, and London: Kluwer Academic Publishers, 1999). For a brief analysis of the critiques on nature-society dichotomization, see: Phil Macnaghten and John Urry, *Contested Natures* (London, Thousand Oaks, and New Delhi: SAGE Publications, 1998), pp. 7-15.

²² An example of this paradigm can be found in the writings of Ali Kemal Yiğitoğlu (1901-1955). an important professional forester –and later an MP– of the Republican era. For him, the history of forestry in Anatolia is "the history of forest destructions." He asserts that the transport costs and low value of timber prevented

Following the Tanzimat Edict of 1839, and especially after the Crimean War, the Ottoman government sought new sources of wealth for its endeavor to establish a new type of administration for the exploitation of the Empire's natural resources to bolster the treasury. The Ottoman official discourse claimed that the material and moral uses and benefits of forests were universally recognized facts and accepted without question by all major nations and governments. Thus, the Ottoman government also had to consider these axioms and try to adopt and follow the rules, regulations, and principles of scientific forestry pertaining to the protection and prosperity of forests within the country in order to produce wealth. In the Ottoman Empire, scientific and rational forestry, other things being equal, was understood as the utilization and protection of forests. The idea of productivity meanwhile had already been recognized, especially in agriculture and manufacturing, beginning with the Tanzimat reforms of the 1840s.

The background of this process was to be found in the early nineteenth century considerations, or 'beliefs', about the (super)abundance of Ottoman natural resources awaiting utilization. When the French 'forest mission' arrived in the Ottoman Empire, one of the first questions they asked was whether the Ottoman Empire really contained immense forests. Though questioned from time to time, this 'belief' maintained its dominancy until the end of the nineteenth century

any major destruction of the Ottoman forests before the 1850s. But then forest lands began to degrade because of the widespread and unregulated encroachment of local people in search of forest produce and grazing grounds. He adds that this period also coincided with the spread of fire for land clearances and charcoal production. According to the author, such destructions and the developments in the world timber market forced the Ottoman government to apply legal limits on forests. On the other hand, the Ottoman view of forests as capital to be exploited for industrialization proved to be wrong, since a 'national economy' only develops through organic laws and thus sudden economic and industrial development is not possible in the underdeveloped world unless the forest policies are worked out through a shorthand and rational imitation of the experiences of developed countries. He criticizes the inefficient forest policies of the Ottoman Empire and proposes two fundamental principles for a better forestry policy for modern Turkey, being reforestation and scientific management of existing forests. Yiğitoğlu, *Ormancılığın Temelleri*, pp. 1-4.

whenever there was a discussion on the economic and financial conditions of the Ottoman state.

The experience of the Ottoman Empire in the aftermath of the Tanzimat period was very similar to the European capitalist experience from the early nineteenth century until the decline of free trade liberalism in the 1870s. In short, the Ottoman state tried to adjust itself to the principles of economic liberalism for rationally utilize its forests in this period. At the same time, however, this period also witnessed the struggle for the protection of the forests and interests of the society in the face of the negative impact of liberal policies in the field of forestry.

Forestry was also a concrete example of the introduction of Enlightenment thought and cameralist principles into the Ottoman Empire. The associated ideas regarding nature and natural resources began to redefine the Ottoman attitude towards its sources of wealth, while ‘technologies of administration’ began to reshape its policies. The Ottoman mind quickly internalized the Western conceptualization of nature, without questioning its inherent dichotomy. This dichotomy reveals itself in the idea of nature as “the raw material for industrial development” and as “an object to be conserved.”²³ The catchwords of this dichotomy in the Ottoman Empire were *menfa‘at* (utilization) and *muhafaza* (protection, conservation). These concepts also emerged as the backbone of utilitarianist and conservationist policies of the state in the second half of the nineteenth century.

The Ottoman administrative practices also regarded the concept of *maslahat* (‘good cause’), which refers here to ‘public interest,’ crucial in the management of economy and natural resources. The Ottoman government in the forest policies of the nineteenth century naturalized this combination, which seems contradictory at

²³ Ari Aukusti Lehtinen, “Modernization and the Concept of Nature: On the Reproduction of Environmental Stereotypes,” in *In Encountering the Past in Nature: Essays in Environmental History*, ed. Timo Myllyntaus and Mikko Saikku (Athens, Ohio: Ohio University Press, 2001), p. 30.

first glance. ‘Utilization’ and ‘protection’ were held up by the government and forestry experts as the causes of ‘rationalization’ of forestry in the nineteenth and twentieth centuries. In fact, the function of the state was presented as the ‘pursuit of public profit’ (*menfa‘at ve maslahat*) by rendering forests more productive.

The roots of such a Benthamite utilitarian approach can be traced back to early Tanzimat period. However, the lack of officials competent and skillful enough to implement effectively the proposed reforms proved to be a daunting problem. To overcome this obstacle, the central government encouraged the establishment of local commissions, to be composed of influential men familiar with local issues. The next component of the utilitarian form of administration was the inspection officials sent from the capital to prepare detailed reports on the state of local affairs, which would then be used to shape policies.²⁴ Until the 1860s, high-level civil officials were charged with the task of gathering information on the economic and material conditions in various regions. In the field of forestry, this rather unproductive practice was abandoned following the arrival of French experts, and due to increases in the numbers of local students of forestry.

One complex aspect of Ottoman forestry during the second half of the nineteenth century was the impact of Ottoman financial problems on the management of its natural resources. This phenomenon entailed the growing influence and intervention of foreign diplomacy and capital as early as the 1850s. Because of the Empire’s deteriorating financial conditions during the Crimean War, the government finally agreed to take out foreign loans in 1854 and 1855 with the British and French as guarantors. In the aftermath of the Crimean War, the Ottoman state set out to reform the administration of the Empire. Financial, military, and

²⁴ For the activities of these inspectors in the provinces, see: Mahir Aydın, “Ahmed Ârif Hikmet Beyefendi’nin Rumeli Tanzimat Müfettişliği ve Teftiş Defteri, (Nisan 1992), 69-165,” *Bellekten* LVI, no. 215 (1992); Ali Karaca, *Anadolu Islahâtı ve Ahmet Şâkir Paşa (1838-1899)* (İstanbul: Eren, 1993); Yonca Köksal, “Tanzimat Döneminde Bulgaristan: Osmanlı Merkezî Devletinin Oluşumu, 1839-1878,” *Toplum ve Bilim* 83 (1999/2000).

technical advisers were invited from Europe. In the short run, however, these attempts at reform failed due to the worsening economic conditions. Then, the government established a budget committee, consisting of British, French, and Austrian experts in 1860, to come up with reliable data on the revenue and expenses of the state. New fiscal reforms were introduced to increase treasury revenues. Meanwhile, the possibility of deriving income from the forests became a frequent topic of discussion among the government circles. The financial crisis that began after the Crimean War deepened during the world economic depression of the 1870s.²⁵

During the first decade following the Crimean War, the influx of foreign capital stimulated a “rapid growth of fictitious prosperity” in the Ottoman Empire.²⁶ However, the public debt accumulated between 1854 and 1875 resulted in the state’s financial bankruptcy. The Ottoman government was forced to pay the interest of these public debts by taking out further loans, because the revenue of the Empire was much lower than its expenses. The state loans had been used to compensate for budget deficits, to buy ironclads, and to construct roads and other public works. Suppressing the rebellions in the provinces, especially in Bosnia, Montenegro, Lebanon, and Crete, further exhausted state resources. Parallel with

²⁵ Due to increased production in America after 1865, wheat prices decreased rapidly between 1873 and 1894, resulting in a decrease in Ottoman exports of the same during this period. Diminishing local output would in turn force the Ottoman government to resort to importing wheat and flour. Şevket Pamuk, “The Ottoman Empire in The “Great Depression” of 1873-1896,” *The Journal of Economic History* 44, no. 1 (Mar., 1984): p. 112. The financial turmoil was accompanied by military defeats and major territorial losses. The Russo-Ottoman War of 1877-78 accelerated the disintegration of the empire. With the Convention of the 4th June, 1878, the Ottoman Empire agreed to allow Cyprus to be occupied and administered by England. On 13 July 1878, the Treaty of Berlin was signed. Serbia and Romania gained its independence. Romania kept Dobrudja, but ceded Bessarabia to Russia. Austria invaded Bosnia and Herzegovina, while the Ottoman Empire abandoned its suzerainty over Montenegro. Moreover, the Ottoman Empire accepted to pay a substantial war indemnity to Russia.

²⁶ “The Difficulties of Turkey,” *The Times*, 13 October 1896, Issue 35020.

these developments in the administration, politics, and economy, was a shift in state's approach to natural resources, particularly with regard to the forest and its products. In other words, this shift in mentality coincided with the material changes in economy and society. Although there was no significant change in technology, the Ottomans began to intensify exploitation of forests and other natural resources in an effort to increase state revenues further. Since its technological capacity remained underdeveloped, the government ended up relinquishing nearly all of its mines to the private sector and directing its efforts toward forest exploitation, which required less sophisticated technology, especially after the 1860s.

The crisis of the 1860s and 1870s are pivotal to understanding the development of modern forestry practices in the Ottoman Empire. The term 'crisis' is meant "a moment of decisive intervention," whereby a new trajectory is imposed on the state.²⁷ Beginning with the 1860s, the Ottoman government struggled to create the necessary conditions for market activities in forest products, but failed due to lack of capital and the high cost of infrastructural investments. As this reality became more and more apparent during the 1860s, the government readjusted its focus to increase the number of concessions to private enterprises in return for revenue. At first, the aim was to invest the money from these concessions in public improvements to stimulate development of forestry, but after the failure of this objective, the government began to rely upon the concessionaires to undertake public works on behalf of itself by granting concessions to the associated roads, facilities, and buildings during the exploitations as well. In return, however, this policy discouraged concessionaires from investing their money in Ottoman forests as the latter had become relatively less lucrative. Nevertheless, the concessions caused the emergence of a new entrepreneurial group of contractors, who were very dependent on state for their fortune.

²⁷ Colin Hay, "Crisis and the Structural Transformation of the State: Interrogating the Process of Change," *British Journal of Politics and International Relations* 1, no. 3 (1999): p. 317.

The ownership, management and administration of forests was in the Ottoman Empire politically, socially, economically, and legally a controversial and contested issue. Forest and their resources are fields of negotiation and contestation, and the nature of their use and exploitation is determined by their specific historical contexts.²⁸ Though the existence of multiple actors affected the nature of trade-offs among these negotiations and contestations in the long *durée*, the state's ability to enforce the scientific principles of forestry and its capacity to persuade the other groups to act in accordance with them shifted drastically in the short term. The aim of rational forest management was to control forest resources for the maximization of state revenues but at the expense of other social groups who also benefited from these resources.

The forest was a source of energy for the people, a source of profit for the merchants and contractors, and a source of wealth for the state, though occasionally these three different objectives converged with one another creating different matrices. Among these, the merchants and contractors were certainly the least concerned when it came to the protection of forests. During the early periods, peasants were depicted as greedy and self-serving, their efforts to derive a profit from forest products making them disrespectful of 'public interest,' to use the catchword within scientific and administrative circles. This assumption led to two distinct and contradictory government policies. Scientific experts and government administrators firstly concluded that the state alone could protect the public interest in forest use against the selfishness prevalent in society. Secondly, they believed that if the state protected the public interest via various free market mechanisms aimed at increasing revenues from forests by means of interventionist government

²⁸ For the nature and a theoretical background of these negotiations and contestations in land issues in the nineteenth century Ottoman Empire, see: Huri Islamoğlu, "Property as a Contested Domain: A Reevaluation of the Ottoman Land Code of 1858," in *New Perspectives on Property and Land in the Middle East*, ed. Roger Owen (Cambridge, Mass. and London, England: Harvard University Press, 2000).

measures directed at protecting forests and preventing subjects from exploiting them for their own selfish interests, the common good and national wealth would be safeguarded. From the very beginning of the implementation of rational forestry in the Ottoman Empire, the government always advocated state ownership of forests, while after the introduction of the 1858 Land Code, private ownership of agricultural land was always encouraged.

As it strove to regulate forests for commercial purposes, the Forest Administration failed to limit the access of local inhabitants and merchants due to the insufficient means at its disposal. The drawbacks that the Forest Administration faced throughout this period in achieving a rational, income generating form of management, served to perpetuate the transfer of forest lands to private individuals and thereby line the pockets of contractors, merchants, concessionaires, and some government officials.

The agricultural economy and fiscal issues comprised the main concerns of the pre-industrial Ottoman state, while forests were viewed as strategic resources. The dominant role in the organization of agriculture and commerce, the provisioning of cities and the monopoly of minting also had a crucial impact on the accommodative and redistributive power of the state. However, this power was less visible in the administration and management of natural resources, such as forests, fisheries, salines, and to a certain extent mines. Compared with agriculture and trade, the power of the state in commanding the latter fields was not necessarily interventionist due to a host of geographical and technical limitations as well as local power configurations. The state interfered in local affairs only when in its need for timber became dire, but even then, the intervention was neither systematic nor well-organized. On the other hand, the state's intervention and regulation of the forest in the nineteenth century was an act of the modern state, which distinguished itself from the pre-industrial by its new tools and techniques. For example, the

Forest Administration became one of the key institutions for extending state control into the provinces and intervening in local politics.

Moreover, the general forest regime of the Empire in the pre-industrial period was marked by regional differences, with the exception of the crown forests near the core areas of the Empire, such as in the Rumelia and Marmara regions, which were also the only forests not administered by local governments. The mainstay of this governance was the principles and traditions derived from Islamic jurisprudence and customary/common law (*örfi hukuk*) and the nature of these principles was occasionally shaped by the particular conditions of the different locations. Due to new interpretations of these principles in accordance with the changing circumstances of the times and by means of sultanic and canonical verdicts on specific cases, the regional differences put their legal imprints on the general forest regime. This is especially true for the taxation and utilization of forest products. After the introduction of the Forest Regulation in 1870, or with the introduction of the scientific forestry regime, the government and the Forest Administration set out to shape the forest regime via a uniform body of rules and regulations to be applied throughout the empire. The decision making process to that end was also centralized in the Forest Administration.

Nevertheless, in the pre-industrial period, the state encountered great obstacles in its efforts to supervise and utilize natural resources. The underdeveloped means of communication and transportation made it difficult to penetrate remote parts of the empire. Following the Tanzimat, the government acknowledged the necessity for improved internal transport and communication facilities within the country in order to develop the resources of the country. The economic and administrative roles attached to the Forest Administration unfolded in the difficult task of establishing equilibrium between the companies' commercial interests in forest products and the state's protective measures. This dual role of the Forest Administration also shaped its policies and achievements. Efforts were

dominated by either economic-financial ('maximizing revenue') or administrative-economic ('maximizing protection') objectives depending on the particular circumstances of the different sub-periods. The administration at times achieved a reasonable balance between the two and became more powerful in exerting pressure upon timber contractors. When contractors realized that short-term economic-financial concerns were dominant in a certain period, they did their best to benefit from these conditions. Moreover, due to the poorly supervised contracts, intense forest cuttings became widespread in every part of the Empire.

On the other hand, the local people resisted the state during the dominancy of the administrative-economic objective. Whenever protective measures surpassed commercial concerns, peasants tended to exploit forests more than before, partly because they were better-off in this period. The commercial interests benefited timber merchants and contractors more than petty loggers and peasants. This administrative-economic objective coincided with the objective of sustainable timber production, which put more economic and technical pressure on the management of forests. However, maximization of revenue outweighed other objectives for a long time, though the administration considered forestry an important source of employment in the rural economy. Efforts to achieve balance between the interests of the state and those of the local people, however, eventually created significant problems for the Forest Administration. For example, timber sold in informal markets by local people emerged to be a major source of trouble for local authorities and tax collectors.

In a paradigm shift at the time, the Ottoman government adopted the mechanistic and positivist concept of the forest from Europe.²⁹ Forestry was thus

²⁹ For a brief discussion of the mechanistic and positivist shift in forestry in Europe, see: O. Ciancio and S. Nocentini, "Forest Management from Positivism to the Culture of Complexity," in *Methods and Approaches in Forest History*, ed. Mauro Agnoletti and S. Anderson, IUFRO Research Series 3 (Wallingford-Oxon, UK and New York: CABI Pub. in association with the International Union of Forestry Research Organizations (IUFRO), 2000).

considered a science in and of itself, and the forest came to be seen as a source of wealth, if properly managed and regulated. The history of forest administration in the Ottoman Empire provides important insight into the nature of scientific and intellectual developments in the nineteenth and twentieth centuries. The implications of the shift to a mechanistic and positivist approach to the forest marked also a change in the political, economic, social, environmental, administrative, and scientific understandings of the period, both at the state and the societal level.

A study of the history of forest management and administration in all its various aspects can help to revise our understanding of Ottoman history writ large. Therefore, I treat the history of forestry within the broader context of the administrative, economic, and environmental history of the Ottoman Empire. Financial and administrative practices as well as drawbacks in the field of forestry had important effects on the change of the environment from the sixteenth to twentieth centuries. However, this thesis does not deal with all the different layers of forest-landscape transformation through the six centuries of Ottoman administration, but rather addresses the pre-industrial and industrial use of forests in the Ottoman Empire and major aspects of the state-forest relationships.

Given that Ottoman technology was rather backward *vis-à-vis* that of Western Europe, North America, and the like, extensive deforestation in the Ottoman Empire might seem an unlikely phenomenon. Nevertheless, deforestation in the Ottoman Empire has its own history and this history has to be studied as part of a global history of deforestation and environmental change. The environment was subjected to alterations during this period. Forest use and forest lands were also transformed, though the causes of these transformations were different from those of the pre-industrial period. The pace was different, the conditions were different, and the extent was different.

The effects of social, economic, and political changes between the 1860s and the end of the Empire were a crucial part of the use and abuse of natural resources. Assessing the change caused by peasants in relation to forests from the archival documents is quite difficult. We can say that they transformed the forests to obtain land, wood, nuts, grassland, timber, tar, resin, pitch, barks, and other minor products and they utilized forests for subsistence and commercial purposes.

In order to trace the responses to change in natural resource management within the Ottoman context, we first need to analyze the nature of state power and its legal manifestations (complexity or simplicity of these manifestations are very important here), and whether they created obstacles to public utilization of natural resources or not. Keeping in mind the fact that a strong bureaucracy between the early Tanzimat reforms and the reign of Abdülhamid II dominated the state administration will help us to uncover important clues concerning the modern forestry policies of the nineteenth century Ottoman Empire.

Four major developments during the nineteenth century were central to the establishment of forest science in the Ottoman Empire. The first was the failure of the tax reform in the early Tanzimat period. The second was the financial concerns of the state treasury that identified the forests as a crucial source of revenue. The third was the decision to create a single state institution that would be responsible for the administration of forest affairs throughout the Empire. Fourth was the fuel requirement of mines and other industries.

The main arguments offered in this dissertation are threefold: Firstly, counter to critiques later put forth, the Ottoman state did, despite its limitations, implement modern forest management in the nineteenth century by adopting the global ideas of rational forestry, which aimed to maximize revenue from forests. However, it must be admitted that because of the geographical differences and the role of technology, the Ottoman case did not always conform to the standard continental

models.³⁰ Secondly, one of the objectives of this dissertation is to demonstrate that the inherent limits and weaknesses of Ottoman modern statemaking, wrongly equated with ‘centralization,’ had a direct impact on the development of forestry. Thus, in a sense, the micro-level analysis of statemaking in the field of forestry will provide a framework for the analysis of macro-level processes that the Empire underwent in the context of the nineteenth century. A third argument is to show that the Ottoman state constituted a distinctive legal regime that enforced the state ownership of forests through the claims of administrative authority and monopoly over the extraction of resources. In other words, the forests became a “domain fit for modern government” in the second half of the nineteenth century.³¹ Yet this development had a couple of important repercussions. First, the forest administration encountered various contestations in the application of legal rules

³⁰ For a similar discussion on the application of rational forest management in India, see: K. Sivaramakrishnan, *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India* (Stanford, Cal.: Stanford University Press, 1999).

³¹ The concept is used by: Arun Agrawal, *Environmentality: Technologies of Government and the Making of Subjects* (Durham, N. C.: Duke University Press, 2005). Agrawal traces the history of government regulation of Kumaon’s forests in the Himalayas from the mid-nineteenth century to the present. He defines the regulation of forests as the development of the “strategies of knowledge and power that created forest environments as a domain fit for modern government” (p. 6). The concept of ‘environmentality,’ adapted from Foucault’s work on governmentality, which aims to “understand and describe how modern forms of power and regulation achieve their full effects not by forcing people toward state-mandated goals, but by turning them [into] accomplices (p. 217).” For the term ‘governmentality,’ see especially: Michel Foucault, “Governmentality,” in *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell, Colin Gordon, and Peter Miller (Chicago: University of Chicago Press, 1991); Colin Gordon, “Governmental Rationality: An Introduction,” in *The Foucault Effect: Studies in Governmentality*, ed. Graham Burchell, Colin Gordon, and Peter Miller (Chicago: University of Chicago Press, 1991). The concept of ‘environmentality’ may be used as a tool for analyzing the colonial and modern “technologies of government” and the peasants’ resistance to them. In response to this resistance, the British government transformed the centralized state forestry into a participatory one following the establishment of village councils beginning in 1931. For Agrawal, such local resource management is not a response and challenge to the state, but a “form of government that encourages (and depends for its success on) the willing participation of those subject to rule and rules.” Agrawal, *Environmentality*, p. 125.

and principles by the other state institutions and local powerholders. Second, the inconsistencies in the application of the rules and regulations concerning land in general and forests in particular created certain vacuums in the exclusive claims of the state, which initiated the appropriation of forest lands by private individuals, a practice that became increasingly widespread especially after the 1880s.

Forest use in the pre-industrial Ottoman Empire is the subject of Chapter 1. Here, I evaluate the Ottoman forest management in relation to traditional land use, provisioning of cities, shipbuilding, and trade. In this chapter, I also look at some of the financial and administrative practices of the state, especially for shipbuilding purposes. This is followed by an analysis of the relationship between these practices and local forest use, including such issues as land clearances, exploitation of mountain forests, and provisioning of cities. The final part of the chapter discusses the conflicts over royal forests and marketing of forest products. By establishing the historical context of Ottoman forestry, I aim to show the background of the complex nature of forest management in the ‘long’ history of the Ottoman Empire. In the pre-industrial period, forests were exploited primarily for military purposes or in relation to regional developments.

Chapter 2 begins with an analysis of the development of free trade policies in the Ottoman Empire, before continuing with a description of foreign and domestic trade in forest products. This is followed by an analysis of Ottoman natural resources through the eyes of the Europeans, who maintained a belief in the immense capabilities of the Ottoman state in this regard. Within this context, the notion of scientific forestry as well as the related concepts of ‘utilitarianism’ and ‘conservationism’ will be emphasized. I then move on to a discussion and description of the European principles and practices of scientific forestry, in particular the German, British, Swedish, and French.

Chapter 3 looks at the early foundation of a forest administration in the Ottoman Empire as the latter realized that the efficient management of forests

demanded more elaborate institutional regulation. A look at the functioning of other institutions in this period provides insight into the Ottoman efforts to come up with a forest management policy. Thus, relations between various different state institutions will also be addressed in this chapter. The chapter focuses on the era that begins with the Tanzimat and ends before the proclamation of Forest Regulation, that is to say, from circa 1840 to 1870. The main concern will be how institutions were influenced and shaped by forestry-related problems and issues. Well-established institutions that had a stake in maintaining the status quo did not easily adjust to the imperatives of the reforms, while others like the Forest Administration considered it as their *raison d'être* to oppose the continuation of old policies. This chapter discusses the Ottoman experience with European scientific knowledge on forestry. As an example, I examine the practices of French forest experts in establishing a modern forest administration that aimed to render forests more productive.

Closely related to the institutionalization of forestry was the process of codification of forest rules and regulations, which will be the focus of Chapter 4. Specifically, the Forest Regulation and subsequent instructions and other regulations concerning forest management, administration, and taxation are the subjects of this chapter. I also include a discussion of the Land Code of 1858 and the Forest Bill of 1861 by way of providing legal background to the 1870 Forest Regulation. Mostly descriptive in nature, this chapter addresses the development of institutions and laws that were designed to administer and manage forests in the nineteenth century. Though a series of sweeping reforms were introduced after the 1860s, the government failed to coordinate these reforms effectively, as is clearly illustrated by the contradictory nature of the laws introduced.

In Chapter 5, I present several case studies which shed light upon the limits to forest administration and management in the Ottoman Empire. Then I move on to highlight some thoughts and concerns of scientific experts in the service of the

Ottoman government between 1857 and 1878. The brief summary of statistics provided in this chapter also helps to illustrate the real conditions and economy of Ottoman forests. The chapter also deals with the shortcomings of the Ottoman Forest Administration. I will also discuss, among other things, the limits within which the Ottoman ‘scientific forestry’ developed during the late nineteenth and early twentieth centuries. In doing so, my aim is neither to judge the success or failure of the Ottoman Empire’s efforts to establish an effective forest administration, nor to blame the Ottoman state for its failed attempts at industrialization. Such approaches do not provide a solid basis for discussing/analyzing the limits of Ottoman industrialization and the factors delineating the institutional framework of the Ottoman state writ large as well as the structural characteristics of Ottoman society.

Finally, in the Conclusion I raise some questions on possible lines of inquiry for further research and address some of the bottlenecks of doing Ottoman forest history.

Writing a history of forestry of the Ottoman Empire that covers the ‘long’ centuries of Ottoman past necessitates a selection from a vast amount of archival documents. Archival materials used in this dissertation were mainly collected from the Prime Ministry Ottoman Archives (BOA). Documents related to forestry can be found primarily in the catalogs of *Bab-ı Ali Evrak Odası*, *Meclis-i Vala*, *Şura-yı Devlet*, and *Yıldız Evrakı* and in the dossiers of Ottoman Ministries of Trade and Forests, Mines, and Agriculture. The disparate state of the primary sources in the archives makes it difficult to follow a specific event or development across years. For example, the many huge dossiers containing the transactions of the *Meclis-i Me‘abir* (Council of Public Works) provide little information on forestry matters. They do provide, however, plenty of information on public improvement projects and mining operations. There are also some books containing collections of transcribed documents about forestry and related issues. Among the most important

of these are H. Kutluk's *Türkiye Ormanlığı ile İlgili Tarihi Vesikalar* and the three-volume *Osmanlı Ormanlığı ile İlgili Belgeler*, published by the Turkish Ministry of Environment and Forest. The latter contains various documents, both original and transcribed, dating from the sixteenth to the twentieth centuries. The former is more sophisticated, but does not contain the original documents. Though the author misread many words, it is not difficult for a careful reader to fix those mistakes. Kutluk's collection covers a much wider period starting with the fifteenth century and ending in 1920s. However, his complicated footnotes nevertheless lacked information that would have made it much easier to locate sources in the archives. For the pre-industrial period, documents relating to forestry can be found in various documents (collections-archives), such as *Mühimmes to Tapu Tahrir Registers*. Other documents are included in sources such as *İstanbul Ticaret Tarihi* and *İstanbul Tarım Tarihi*, published by the Istanbul Municipality. The newspapers of the period, especially *Takvim-i Vakayi*, also contain valuable information on forest related issues. The *Times* newspaper, published in London, was an invaluable resource for discerning European views about Ottoman forest policies. Another important study is that conducted by A. Bricogne, a French forest specialist who worked for the Ottoman government in the nineteenth century. Unfortunately, I have not been able to find any sources written by Ottoman forest experts themselves. As far as archival sources are concerned, there is definitely a lack of quantitative data and consistent, consecutive documentation, making the analysis of long-term processes nearly impossible, though enabling the identification of some short-term processes in Ottoman forest history. The lack of sufficient data, especially for the pre-industrial period, is quite simply due to the fact that the Ottoman state took a much greater interest in agriculture and trade than it did in forests.

CHAPTER 1

PRE-INDUSTRIAL FOREST USE IN THE OTTOMAN EMPIRE

1.1. Introduction

The longevity of the Ottoman Empire, which lasted about six centuries, has been one central aspect of the analyses that focused upon the strength and power of its modes of administration. Despite the alternating cycles of expansion and contraction, the Empire survived until the first quarter of the twentieth century, with sporadic tides of economic and political crisis. While extensive research has been done to uncover the nature and dynamics of these periods of ‘growth’ and ‘decay’, there is still much work to be done on the environmental and ecological history.³² The longevity of the Ottoman state was also very much related to the ecological diversity of the empire.

Some questions appear to be extremely important when dealing with the Ottoman approach to nature and the environment in general, and land and resource use in particular. Was there an extensive environmental change in the pre-industrial period, such as clearing and overuse of forests? What was the actual relationship between the local people and forest resources? How did the state utilize forests for shipbuilding and other state enterprises? In addition, did the Ottoman attitudes

³² For an evaluation of the discussions on the Ottoman ‘decline paradigm,’ see: Donald Quataert, “Ottoman History Writing and Changing Attitudes Towards the Notion of “Decline”,” *History Compass* 1, no. 1 (2003).

toward nature, environment, and natural resource use have similarities with those prevalent in Europe?³³

Braudel once said that the constraints or advantages of geography deeply affected the development of any ‘civilization’. Implicit in this is an assumption that a discussion based on the nature of a ‘civilization’ necessitates an evaluation of the “space, land and its contours, climate, vegetation, animal species and natural or other advantages” of the given geographical and ecological situation.³⁴ Likewise, the land and natural resource tenure in any given geography should be assessed in relation to the command and utilization of these resources, both areas in which the pre-industrial states encountered great difficulties.

In the large number of earlier studies on the Ottoman formation period, there are only a few references to the ‘contours’ of geographical, but not ecological, advantages of the Ottoman principality. For example, W. L. Langer and R. P. Blake, in an essay dated from 1932, stressed that the geographical position of the Ottomans necessitated their rapid expansion in a geo-strategical context in which

³³ For the history of environmentalist ideas and attitudes toward nature and environment in the West, see: Glacken, “Reflections on the History of Western Attitudes to Nature.”; Clarence J. Glacken, *Traces on the Rhodian Shore: Nature and Culture in Western Thought from Ancient Times to the End of the Eighteenth Century* (Berkeley: University of California Press, 1967); David Pepper, *The Roots of Modern Environmentalism* (London: Croom Helm, 1984); Michael Williams, *Deforesting the Earth: From Prehistory to Global Crisis* (Chicago and London: University of Chicago Press, 2003); Donald Worster, *Nature’s Economy: A History of Ecological Ideas*, 2nd ed. (Cambridge and New York: Cambridge University Press, 1994). For the discussions of attitudes toward nature and the environment in the context of particular regions, see: Keith Thomas, *Man and the Natural World: Changing Attitudes in England, 1500-1800* (Harmondsworth: Penguin, 1984); Michael Williams, *Americans and Their Forests: A Historical Geography* (Cambridge and New York: Cambridge University Press, 1989); Donald Worster, *American Environmentalism: The Formative Period, 1860-1915* (New York: Wiley, 1973).

³⁴ Fernand Braudel, *A History of Civilizations*, trans. Richard Mayne (London: Penguin Books, 1993), p. 9.

the Byzantine frontier administration was weak.³⁵ Later, İnalçık elaborated upon this idea claiming that gaining a foothold in the Balkans was a crucial development for the Ottoman principality, providing for a ‘limitless expansion towards the west.’³⁶ With respect to their implications, these arguments stress the political and military success of the early Ottomans in terms of their geographical expansion, but do not illuminate the advantages of the natural resources at their disposal.

From their earlier political core area around Söğüd, the Ottomans expanded throughout northwestern Anatolia, reaching Nicaea, Biga and Gallipoli, and then extended into the Balkans and Thrace. These regions were covered with extensive forests, pastures and grazing lands. It was very important for the Ottomans to take control of these resources, as their need for wood and grassland increased during territorial expansion.³⁷ During the early expansion period, the Ottomans established new villages in the Balkans by settling nomadic populations deported from Anatolia. Many *yürük* tribes also set up villages in the mountainous regions.³⁸ This ‘colonization’ might have been costly for both the state and the settlers, but the availability of sufficient raw materials in the conquered lands certainly facilitated the process. The Ottoman Empire had a wide variety of natural resources at its disposal, including mines and forests. However, this does not mean that the success

³⁵ W. L. Langer and R. P. Blake, “The Rise of the Ottoman Turks and Its Historical Background,” *American Historical Review* 37 (1932).

³⁶ Halil İnalçık, *The Ottoman Empire: The Classical Age, 1300-1600* (London: Weidenfeld & Nicolson, 1973), p. 9.

³⁷ It is interesting to note that until late in the nineteenth century, the Ottomans, like the Byzantines before them, referred to the region extending from Izmit to Sakarya valley as the “sea of trees” (*ağaç denizi*). The analogy is attributed to Evliya Çelebi. He noted that the mountains of this region was thickly covered with very large and high trees. Asuman Baytop, *Türkiye’de Botanik Tarihi Araştırmaları* (Ankara: Türkiye Bilimsel ve Teknik Araştırma Kurumu, 2003), p. 38.

³⁸ İnalçık, *Ottoman Empire*, pp. 10-11.

of Ottoman statemaking was predetermined by geography and natural resources alone, but that the latter impacted other contingent and self-regulating factors.

Existing studies on the Ottoman pre-industrial period in general have neglected the geophysical, environmental, and ecological contexts, instead focusing mainly upon political, cultural, economic, and demographic developments.³⁹ The change in forest cover is as much a ‘historical process’ as a ‘geographical phenomenon,’⁴⁰ since the natural environment is a dynamic element in history, or an active and “powerful determining force throughout history.”⁴¹ An analysis of varied attitudes toward the environment and nature in the pre-industrial period will reveal many important aspects of the Ottoman state and society.

From the sixteenth to the eighteenth centuries, the state was concerned mostly with supplying wood to urban centers, peasants’ and townspeople’s rights to fuel wood and pasturage, and allotments of the military institutions. However, there

³⁹ As such, empirical research on the pre-industrial period based upon the “conventional” archival documents still reveals many important aspects of human-nature relationships in Ottoman history, though an interdisciplinary study is needed. For some pioneering works on the impacts of geography and environment on historical change, see the works of French Annalists, namely Lucien Febvre, Marc Bloch, Fernand Braudel, and Emmanuel Le Roy Ladurie. Annalists, in general, emphasized the importance of the natural environment in shaping human activity. See in particular: Emmanuel Le Roy Ladurie, *Histoire du climat depuis l’an mil* (Paris: Flammarion, 1967); Emmanuel Le Roy Ladurie, *Times of Feast, Times of Famine: A History of Climate since the Year 1000* (Garden City, N.Y.: Doubleday, 1971). Hubert H. Lamb, *Climate, History, and the Modern World*, 2nd ed. (London and New York: Routledge, 1995 [1982]). For a critique of Annales historians in relation to environment and human agency, see: Peter Burke, *The French Historical Revolution: The Annales School, 1929-89* (Cambridge: Polity, 1990); William A. Green, *History, Historians, and the Dynamics of Change* (Westport, Conn. and London: Praeger, 1993).

⁴⁰ Williams, *Deforesting the Earth*, p. xxi.

⁴¹ Timo Myllyntaus, “Environment in Explaining History: Restoring Humans as Part of Nature,” in *Encountering the Past in Nature: Essays in Environmental History*, ed. Timo Myllyntaus and Mikko Saikku (Athens, Ohio: Ohio University Press, 2001), p. 142. The quotation is from: Donald Worster, “History as Natural History: An Essay on Theory and Method,” *Pacific Historical Review* 53, no. 1 (1984): p. 5.

were almost no holistic regulations specifically defining the rights, sanctions, and privileges of beneficiaries of forest products. One exception to this might be the Imperial Shipyard, which had its own terms of exploitation whereby it conformed to strictly supervised measurement tabulations.

In this chapter, my aim will be to re-evaluate some preconceptions regarding Ottoman land use, provisioning of cities, shipbuilding, and trade, with a new perspective differs from the traditional and human-centered approaches. Although it is difficult to reconstruct the natural environment of the pre-industrial Ottoman Empire with the available sources, it is nonetheless possible to study the interaction between the Ottoman state, culture, and economy with its geography and environment, and to delineate different power configurations emerging from this interaction.

1.2. Geography, Environment and Factors of Forest Change

Asia Minor contained some of the earliest settlements of the Neolithic Revolution. The longevity of human settlement and the consequent pressure on natural resources suggests that forest utilization was an integral part of the daily life in the Neolithic, from hunting and gathering to husbandry and from swidden to settled agriculture. Traces indicating the spread of agriculture and animal husbandry are easily identifiable in many parts of the peninsula from east to west. From that time onwards, one can also trace the constant change of the forest landscape, for better or worse, throughout the centuries. The temperate environment of Anatolia and of the Mediterranean in general, made it the ideal home for a great variety of forest species beginning at the end of the Ice Age.⁴² The diversity of flora

⁴² J. V. Thirgood, *Man and the Mediterranean Forest: A History of Resource Depletion* (London and New York: Academic Press, 1981), passim.

on the peninsula was likely due not only to its climate, but to its topography and geography as well. However, there is also the nonhuman transformation of this landscape through environmental factors.⁴³ Thus, it is difficult to distinguish between the human and nonhuman factors responsible for the change and dynamics of the forest landscape. Suffice it to say that there is a long history of forest use, landscape change, and deforestation in Anatolia.

Forests in Anatolia concentrated mostly on the western, northern, and southern mountain chains. As was true in the nineteenth century, the southeast and central plains of the peninsula contained relatively few forests. Though the exact distribution of the forests in the past is difficult to reconstruct, valuable information on the condition and distribution of Anatolian forests is to be found in the classical works of Greece. For example, according to Homer's *Iliad*, the plains around Mount Olympos (Uludağ) were covered with thick forests, which had partly been deforested in the nineteenth century.⁴⁴ On the other hand, Strabo states in his writings that the forests of the Mediterranean lands and the Levant were much richer and more widespread in the first millennium BCE than they were in the nineteenth century.⁴⁵ However, deforestation was common in ancient times as well.⁴⁶ Figure 1 gives an idea about the distribution of forests in the Mediterranean region in ancient times.

⁴³ Ibid.

⁴⁴ The contemporary sources are extensively used by many historians to describe ancient forests and landscape. Among these, one can cite: J. Donald Hughes, *Ecology in Ancient Civilizations* (Albuquerque: University of New Mexico Press, 1975); J. Donald Hughes, *The Mediterranean: An Environmental History* (Santa Barbara, Cal.: ABC-CLIO, 2005); Russell Meiggs, *Trees and Timber in the Ancient Mediterranean World* (Oxford: Clarendon Press, 1982); Thirgood, *Man and the Mediterranean Forest: A History of Resource Depletion*. J. Donald Hughes and J. V. Thirgood, "Deforestation in Ancient Greece and Rome: A Cause of Collapse," *The Ecologist* 12, no. 196-208 (1982).

⁴⁵ W. C. Brice, "Ghâba," in *Encyclopedia of Islam*, ed. H. A. R. Gibb et al (Leiden: Brill, 1960-).

⁴⁶ For references, see footnote 44 above.

The Mediterranean forests are typically composed of broad-leaves—especially oaks, both evergreen and deciduous—and conifers, particularly pine species and junipers.⁴⁷ Today, in the mountainous regions of Anatolia, many empty landscapes of limestone ridges are good examples of long-term deforestation that has probably been continuing since the last glacial age.⁴⁸ However, the degradation throughout history also produced the vegetation of other species and shrubs, like the *maquis* and the *garrigue*.⁴⁹ Western Anatolia, for example, has been known to have a considerable amount of *maquis*-cover. Even now, they are the characteristic vegetation of siliceous soils, where the winter rainfall and summer drought are the characteristic climate features. Whether the formation of *maquis* is natural (a part of the ecosystem) or artificial (the result of fire and human exploitation) has been a matter of debate among researchers,⁵⁰ but in any case it is a fact that the land now covered by *maquis* was covered with evergreen oak forests in the past.⁵¹

⁴⁷ Pollen records are used to highlight the environmental change in the Mediterranean ecosystems since the end of the last ice age, roughly 12,000 years ago. According to these records, many Mediterranean regions were dominated by oaks and pines in the ancient times. (See also Rackham 1990). John R. McNeill, *The Mountains of the Mediterranean World: An Environmental History* (Cambridge and New York: Cambridge University Press, 1992).

⁴⁸ For a more scientific and historical study of deforestation in the Mediterranean, see: Hughes, *Mediterranean*; McNeill, *Mountains of the Mediterranean World*.

⁴⁹ Guseppe Scarascia-Mugnozza and others, “Forests of the Mediterranean Region: Gaps in Knowledge and Research Needs,” *Forest Ecology and Management* 132 (2000): p. 99; Thirgood, *Man and the Mediterranean Forest*.

⁵⁰ R. Tomaselli, “Degredation of the Mediterranean Maquis,” in *UNESCO, Mediterranean Forest and Maquis: Ecology, Conservation and Management* (Paris: UNESCO, 1977); UNESCO, *Mediterranean Forest and Maquis: Ecology, Conservation and Management* (Paris: UNESCO, 1977). Cited in: Williams, *Deforesting the Earth*, p. 77.

⁵¹ John Whittow, *Penguin Dictionary of Physical Geography* (London and New York: Penguin Books, 1984), p. 325.

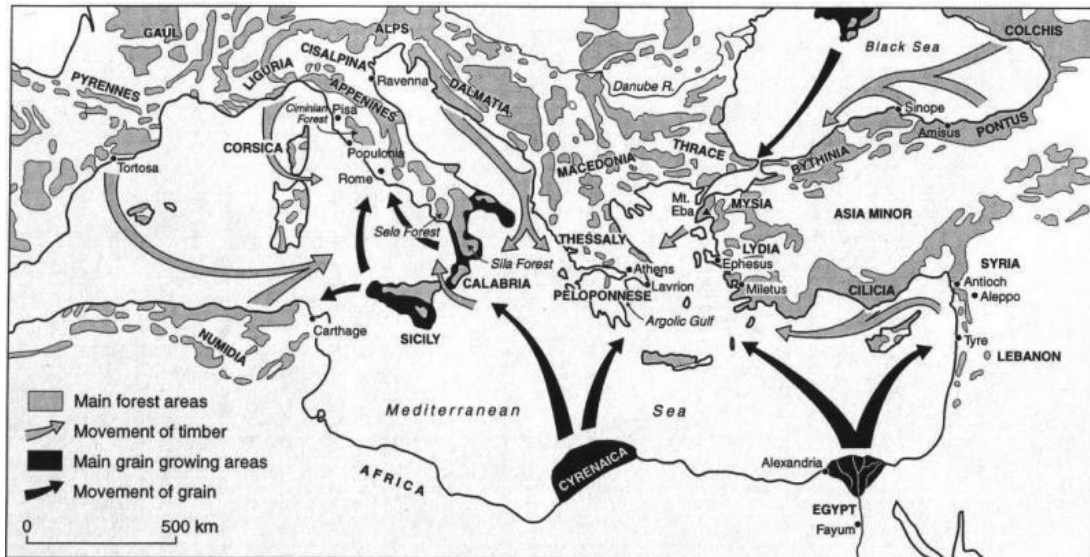


Figure 1: Major timber- and grain-growing areas and trade routes in the Mediterranean basin, 4th-1st century BCE.

Source: after Williams, *Deforesting the Earth*, p. 78.

The spread of tillage, grazing, and fires, the need for timber for commercial and military shipbuilding, constructions, and heating, mining, urbanization and devastation caused by wars, all reduced the extent of the forest cover, especially in the mountainous areas. However, it is possible that the lowland forests had already been disappeared before the depletion of montane forests.⁵² The major cause of the degradation of lowland forests was the relative backwardness of agriculture, which required large tracts of land for cultivation. Moreover, the pressure on forests might have increased during the times of population growth and massive immigrations. The Wars and political violence also triggered forest change. For example, as a natural barrier, a forest might be burned down by armies on the march, such as forests in Konya-Karaman region that were destroyed by fires due to the struggle

⁵² Thirgood identifies the major agents of deforestation in the Mediterranean region as follows: 1) intrinsic features of soil and climate; 2) changes in climate; 3) factors of de-vegetation; 4) impacts of human cultures; 5) skills in resource management; 6) obstacles of poverty; 7) deep-rooted traditions; 8) economic forces; and 9) political events. The author claims that the human-related factors were the major agents of change in the deforestation. Thirgood, *Man and the Mediterranean Forest*, p. 6. Also see: Thirgood, *Man and the Mediterranean Forest: A History of Resource Depletion*, pp. 6-80; Williams, *Deforesting the Earth*, pp. 79-95.

between Anatolian Seljukids and Ilkhanids during the last quarter of the thirteenth century.⁵³

Public utilization of forests for firewood and charcoal was another cause of forest change. Moreover, the incessant need for fuel for mining industries and timber for shipbuilding took its toll as well. Broad-leaved trees, such as beech, oak, or chestnut, rather than conifers were preferred for producing charcoal, while the timber industry favored conifers, and shipbuilding needed both. These preferences greatly affected forest succession in certain regions.⁵⁴

Although the rapid territorial expansion and population growth until the end of sixteenth century must have put pressure on the forests in the Black Sea, Aegean, and Marmara regions as well as those in the Balkans, sometimes land was deserted as well, such as in the case of the *Celali* revolts during the sixteenth century, thereby leading to an increase in forest vegetation, so long as the abandoned lands were not invaded by other peoples. Moreover, the lack of communication and transportation facilities had a positive impact on forest degradation. For example, most of the rivers or their tributaries in the Balkans and Anatolia were not suitable for navigation or floating of timber—though there were some exceptions to this rule.⁵⁵

In its discussion of political and economic developments in the pre-industrial period, Ottoman historiography has neglected the impact of such developments

⁵³ “Karaman-Oghulları,” in *Encyclopedia of Islam*, ed. H. A. R. Gibb et al. (Leiden: Brill, 1960-).

⁵⁴ M. Agnoletti, “Introduction: Factors and Processes in the History of Forest Resources,” in *Forest History: International Studies on Socioeconomic and Forest Ecosystem Change*, ed. M. Agnoletti and S. Anderson (Wallingford, Oxon [England] and New York: CABI Pub. in association with the International Union of Forestry Research Organizations (IUFRO), 2000).

⁵⁵ [Louis A. A.] Bricogne, “Les fôrets de l’empire Ottoman,” *Revue des Eaux et Fôrets Annales forestières* 16 (Août 1877): passim; [Louis A. A.] Bricogne, “Les fôrets de l’empire Ottoman,” *Revue des Eaux et Fôrets Annales forestières* 16 (Juillet 1877): passim.

upon the natural environment. Financial and administrative arrangements as well as shortcomings in the time span between the fourteenth and eighteenth centuries played a critical role in shaping the environment. Since resource extraction was necessary for financing the imperial ambitions of statemaking, the Ottoman government launched large-scale infrastructural projects. For example, plans were drawn up to build a canal between the Sakarya River and the Gulf of Izmid by the Ottoman government in the second half of the sixteenth century to facilitate communication. However, this plan was never realized. A possible water connection between Izmid and Adapazarı could have led to more efficient exploitation of local forest resources and provided a major timber supply for shipyards and trade. While discussing the underdeveloped state of port cities in the sixteenth century, Faroqhi indeed claims that had the project been carried out, “it would have led to a precocious growth of Izmit and Adapazarı around 1600.”⁵⁶ Nevertheless, if we look at the failure of this large project from a different perspective, we will notice that it was fortunate for nature and the environment, since this failure kept forest resources from being immediately depleted and protected the ecological balance of the region to some extent.

The exact distribution and composition of the Ottoman forests in the pre-industrial period is difficult to reconstruct. For the same reason, it is hard to assess the extent of forest change. Nevertheless, it is still possible to deduce some minute information from the archival resources on the clearings and exploitations of forests that were stimulated by governmental institutions and by local inhabitants. Works of travelers and contemporary sources and archival materials also provide valuable information, though such data have no statistical value.⁵⁷ As a student of world

⁵⁶ Suraiya Faroqhi, *Towns and Townsmen of Ottoman Anatolia: Trade, Craft, and Food Production in an Urban Setting, 1520-1650* (Cambridge and New York: Cambridge University Press, 1984), p. 75.

⁵⁷ Some information on the natural resources and landscape of the Ottoman Empire from the sixteenth century to the end of the eighteenth century can be found in: P. Belon, *Les Observations de Plvsievrs Singvlaritez et Choses Memorables*

history once commented, the Ottoman records “have yet to be interrogated from the point of view of environmental history.”⁵⁸

1.3. Agrarian and Nomadic Land Use and Forests

There is an extensive literature on the development of urban and rural life, of agriculture, and of commerce in the pre-industrial Ottoman Empire.⁵⁹ This

Trovvees en Grece, Asie, Iudée, Eygpte, Arabie et Autres Pays Estranges, Redigées en Trois Liures, Reueuz de Nouveau et Augmentez de Figures, 4 revised ed. (Paris: 1588); W. Eton, *A Survey of the Turkish Empire*, 3rd ed. (London: T. Cadell, 1801); Richard Knolles and others, *The Turkish History, from the Original of that Nation, to the Growth of the Ottoman Empire, with the Lives and Conquests of Their Princes and Emperors*, 6th ed., 3 vols. (London: T. Basset, 1687); Donald Edgar Pitcher, *An Historical Geography of the Ottoman Empire: From Earliest Times to the End of the Sixteenth Century* (Leiden: E. J. Brill, 1972); Joseph Pitton de Tournefort, *A Voyage into the Levant: Containing the Ancient and Modern State of the Islands of the Archipelago, as Also of Constantinople, the Coasts of the Black Sea, Armenia, Georgia, the Frontiers of Persia and Asia Minor*, 2 vols. (London: Printed for D. Browne [etc.], 1718); Paul Rycaut, *The Present State of the Ottoman Empire* (London: John Starkey and Henry Brome, 1668); J. B. Tavernier, *Nouvelle Relation de L'intérieur du Sérail du Grand Seigneur* (Cologne: Corneille Egmon, 1675).

⁵⁸ J. R. McNeill, “China’s Environmental History in World Perspective,” in *Sediments of Time: Environment and Society in Chinese History*, ed. Mark Elvin and Liu Ts’ui-jung (Cambridge and New York: Cambridge University Press, 1998), p. 42.

⁵⁹ Bruce McGowan, *Economic Life in Ottoman Europe: Taxation, Trade, and the Struggle for Land, 1600-1800* (Cambridge and New York: Cambridge University Press, 1981). Halil İncalçık, “The Ottoman State: Economy and Society, 1300-1600,” in *An Economic and Social History of the Ottoman Empire, 1300-1914*, ed. H. İncalçık and D. Quataert (New York: Cambridge University Press, 1994); Nikolai Todorov, *The Balkan City, 1400-1900* (Seattle: University of Washington Press, 1983). Huri İslamoğlu-İnan, *State and Peasant in the Ottoman Empire: Agrarian Power Relations and Regional Economic Development in Ottoman Anatolia During the Sixteenth Century* (Leiden and New York: E.J. Brill, 1994). Amy Singer, *Palestinian Peasants and Ottoman Officials: Rural Administration around Sixteenth-Century Jerusalem* (Cambridge and New York: Cambridge University Press, 1994). Edhem Eldem, *French Trade in Istanbul in the Eighteenth Century* (Leiden and Boston: Brill, 1999); Edhem Eldem, Daniel Goffman, and Bruce A. Masters, *The Ottoman City between East and West: Aleppo,*

literature, however, has not yet matured enough to cover land use in all its aspects. In addition to the absence of narrative sources, there exist almost no archaeological or anthropological studies specifically addressing the history of peasantry for the formative period of the Ottoman state and thereby illuminating peasant life and utilization of natural resources at that time. In the strict sense, land use (or utilization) here is defined in a functional way—though today organic classification is preferred, in which the land is categorized into cultivated, pasture and meadow, forest and woodland, and wasteland, including land not used for cultivation and pasture—and deals with the spatial aspects of land surface that is adapted, or could be adapted to serve human needs.⁶⁰

Agriculture was the main source of subsistence for peasants, but due to the low levels of output, forest lands were cleared to create more farming land and thus meet food demands. This was one of the major causes of permanent deforestation, unless the reclaimed tracts afforested after cultivation ceased. Clearing could also be done, however, in order to plant olive and citrus trees. Though clearing forests was an important part of agriculture, there are no discernible traces of extensive forest clearances in the pre-industrial period due to the lack of documentary sources, whereas in Europe ample sources indicate that the eleventh and thirteenth centuries encompassed a period of swift deforestation, which is called “*les grands défrichements*.”⁶¹

Izmir, and Istanbul (New York: Cambridge University Press, 1999). Nelly Hanna, *Money, Land and Trade: An Economic History of the Muslim Mediterranean* (London and New York: I.B. Tauris, 2002).

⁶⁰ Brian Goodall, *The Penguin Dictionary of Human Geography* (London and New York: Penguin, 1987).

⁶¹ For a seminal work on the deforestation of rural France, see: Marc L. Bloch, *French Rural History: An Essay on Its Basic Characteristics*, trans. from the French by Janet Sondheimer (Berkeley and Los Angeles: University of California Press, 1970 [1932]). A reconstruction of the major forest areas of Europe on the eve of *les grands défrichements* can be found in: Charles Higounet, “Les forêts de l’Europe Occidentale du V^e au XI^e siècle,” in *Agricoltura e mondo rurale in occidente nell’alto medioevo* (Spoleto: Setimane di studio del centro italiano di

İnalçık typifies the history of landholding in the Ottoman Empire as a “constant struggle between the state and the individual for control of agricultural lands, which constituted the principal source of wealth for capital formation or state finances.”⁶² He underlines that in this struggle, the state inclined to protect the rights of small landholders’ *vis-à-vis* the local magnates by means of its agents in the local regions, *sipahis* and *kadıns* (local judges).⁶³ The government always encouraged cultivation to increase the revenues of the state. The agrarian production was sustained through the *timar* system, whereby state-owned (*miri*) lands were leased to tenants under specific conditions.⁶⁴ The basis of the system was the peasant household, or the basic agricultural unit (*çift-hane*), with each household being given a plot of land, called *çiftlik*, ranging from 60-150 *dönüms* (1 *dönüm* being equal to 919.3 square meter), depending on the fertility of the soil.⁶⁵ The cultivated lands on pastures were also called *çiftlik* in the survey registers. The summer pastures (*yaylak*) “might include a few *çiftlik*s and orchards or walnut trees that were subject to taxation.”⁶⁶ A large section of nomads mainly engaged in animal husbandry, in fact, practiced agriculture as a supplementary economic

studi sull’alto medioevo, 13, 1966). Cited in: Williams, *Deforesting the Earth*, p. 102.

⁶² Halil İnalçık, “The Emergence of Big Farms, Çiftlik: State, Landlords and Tenants,” *Turcica* III (1983): p. 105.

⁶³ Ibid., p. 106; İnalçık, *The Ottoman Empire: The Classical Age, 1300-1600*, p. 104.

⁶⁴ Ömer Lütfi Barkan, “XV ve XVI’ıncı Asırlarda Osmanlı İmparatorluğu’nda Toprak İşçiliğinin Organizasyonu Şekilleri,” in *Türkiye’de Toprak Meselesi* (İstanbul: Gözlem Yayınları, 1980 [c. 1939-40]).

⁶⁵ İnalçık, “Emergence of Big Farms,” p. 106.

⁶⁶ Halil İnalçık, “The Yürüks: Their Origins, Expansion and Economic Role,” in *In Oriental Carpet and Textile Studies II: Carpets of the Mediterranean Countries, 1400-1600*, ed. Robert Pinner and Walter B. Denny (London: Halı Magazine, 1986), p. 49.

activity on these pasture lands, which the Ottoman government essentially defined as “lands outside the arable lands.”⁶⁷

These peasant households were the pillars of the *timar* system. However, this system began to deteriorate when the state-owned lands gradually converted into big estates after the end of the sixteenth century.⁶⁸ This process meant the enlargement of *çiftlik*s at the expense of peasant smallholders. İnalçık claims that these large agricultural lands, “organized as a production unit under a single ownership and management and usually producing for market,” emerged especially on *mevat* lands, or waste or abandoned lands. Such an activity was called the *ihya-yı mevat* (bringing a wasteland into cultivation) or *şenlendirme* (making inhabited and prosperous).⁶⁹ Opening up marginal lands to cultivation must have affected the ecology of habitats, but we know very little about the relationship between the loss of forest cover and changes in crop use.

There were many references to the agricultural lands reclaimed from forests in the survey registers.⁷⁰ The usage of the word *açma* (‘reclaim’) reflects the Ottoman approach to such woodlands in summer pastures. For the Ottoman mind, such agricultural clearings were beneficial insofar as they increased the tax revenues of the state, since the main concern of the government was to maximize its agricultural revenues. Therefore, the reclamation of lands and agricultural clearings by nomads made them liable to state control and taxation. However, the government approved such ‘reclaimed’ lands, unless they were acquired from reserved forests for shipyard or for imperial hunting.⁷¹

⁶⁷ Ibid.

⁶⁸ İnalçık, “Emergence of Big Farms,” p. 107.

⁶⁹ Ibid., pp. 108-11.

⁷⁰ İnalçık, “Yürüks,” p. 49.

⁷¹ HK, *Doc. No. 380* (3 M 982/25 April 1574). HK, *Doc. No. 96* (12 N 1196/21 August 1782). HK, *Doc. No. 63* (11 M 1019/5 April 1610).

Although natural fires were one of the major causes of forest destruction during the dry seasons, human-made fires were the chief instrument for opening up forest land to agriculture, and it was applied especially in coniferous forest regions, due to the acidic surface of land in those regions. Setting fires served to increase the productivity of the land. The ashes of scrubs were used as manure to supply potassium for the soil. If the forest land was extensive enough, then slash-and-burn cultivation could be productive as well. However, it generally worked at the expense of coniferous forests and gradually supported the development of deciduous forests, meadows, and pastures. On the other hand, deciduous forests were more suitable for peasants as coppices.⁷² Most probably, these aspects were common knowledge among local people and practiced throughout the world in the pre-industrial period.

Land clearances in this period might have been an alternative way of compensating the tax demands of the state. Since such forest lands were not productive, peasants might have used them temporarily to meet arbitrary tax demands, which at the time might have surpassed their “potentially taxable surpluses.”⁷³ In addition to the agriculturalists’ relationship to forest lands, we also need to know about semi-nomadic pastoralists’ relationship with the forests. However, it is difficult to know the exact nature of this interaction because of the semi-nomad’s mobility. Even if they did extensive land clearances for agricultural purposes, i.e. slash-and-burn agriculture, there was a possibility for these cleared forest lands to regenerate.

⁷² Ismo Björn, “Life in the Borderland Forests: The Takeover of Nature and Its Social Organization in North Karelia,” in *Encountering the Past in Nature: Essays in Environmental History*, ed. Timo Myllyntaus and Mikko Saikku (Athens: Ohio University Press, 2001), p. 63.

⁷³ For example, see: Sally Humphries, “Milk Cows, Migrants, and Land Markets: Unraveling the Complexities of Forest-to-Pasture Conversion in Northern Honduras,” *Economic Development and Cultural Change* 47, no. 1 (Oct 1998).

As one part of the *ihya-yı mevat* policy, the Ottoman government sought to sedentarize nomadic, or transhumance populations for agricultural and taxation purposes. They were seen as unruly and a threat to the settled populations because of their mobile way of life and because their grazing herds sometimes caused damage to the cultivated lands. Often though there was also a symbiotic relationship between nomadic and settled populations. Nomadic herds could travel long distances in search of better water resources and pastures, or they could be herded through a continuous movement between summer and winter pastures. The sedentarization policies of the Ottoman government limited the practice of transhumance in many regions of Anatolia, but sometimes at the expense of ecological benefits.⁷⁴

Many new villages were established in the Balkans and Anatolia, and thus many new lands were opened up to agriculture due to mass deportations.⁷⁵ The system of colonization and mass deportation (*sürgün*) of nomadic and sedentary populations might have affected the environment of the newly conquered lands. These policies of mass deportations, applied by the Ottomans for centuries, might have encouraged forest clearances in many parts of Anatolia and the Balkans. For example, the *sürgün* policy to Cyprus after its conquest to make the island more prosperous was an important step in this regard. The earliest deportees were mostly poor peasants, unemployed city-dwellers, and nomads. They were exempted from taxation for two years. Subsequently, the government decided to deport criminals as well.⁷⁶ All these deportations placed more pressure upon the natural resources. They meant the incoming of a demographic element unfamiliar with the physical

⁷⁴ For a well-written analysis of Ottoman settlement policies in the pre-industrial period, see: Cengiz Orhonlu, *Osmanlı İmparatorluğunda Aşiretleri İskân Teşebbüsü (1691-1696)* (İstanbul: İstanbul Üniversitesi Edebiyat Fakültesi, 1963).

⁷⁵ Halil İnalcık, "Ottoman Methods of Conquest," *Studia Islamica* II (1954): pp. 122-29.

⁷⁶ *Ibid.*, p. 123.

environment of the geographical area in question. Newcomers therefore had to start from scratch in most of the cases to adapt themselves to the new agrarian surrounding. On the other hand, nomadic deportations entailed the loss of local knowledge of the environment they left behind.

Many nomadic Turkmen populations living in the Taurus Mountains, such as the *Tahtacılar* (Lumberers), or the *Ağaç erleri* (Woodcutters) were engaged in timber trade and possessed knowledge on the growth of trees and their cutting seasons. They knew also which trees were best for producing charcoal and pitch. The trade in wood, timber, and charcoal was an effective way of accumulating wealth for nomads. They also transported such forest products to southern Mediterranean ports for export to the Levant and to Egypt by merchant ships. In the fifteenth century, this trade was already developed and very profitable. Mehmed II monopolized this rewarding trade and then the Ottoman government began buying directly from the nomads and transporting the products to the previously mentioned destinations.⁷⁷ The involvement of the state in local resource use probably changed the traditional methods of forest utilization.

Another important factor of change was the establishment of the *malikane* system in 1695—the system of long-term farming out of revenue sources in return for an initial payment and subsequent annual payments,⁷⁸—whereby it seems that the *malikane*-owners claimed rights over forests and sometimes leased them with a *resm-i tapu* (entry fine) to certain peasants at the expense of customary rights. On

⁷⁷ İnalçık, “Yürüks,” pp. 52-53.

⁷⁸ For a path-breaking study, which open up new vistas for the eighteenth century Ottoman land tenure regime, see: Mehmet Genç, “Osmanlı Maliyesinde Malikâne Sistemi,” in *Türkiye İktisat Tarihi Semineri, Metinler/Tartışmalar (8-10 Haziran 1973)*, ed. Osman Okyar and Ünal Nalbantoğlu (Ankara: Hacettepe Üniversitesi, 1975). For a comparison, also see: McGowan, *Economic Life in Ottoman Europe: Taxation, Trade, and the Struggle for Land, 1600-1800*; Ariel Salzman, “An Ancien Regime Revisited: ‘Privatization’ and Political Economy in the Eighteenth-Century Ottoman Empire,” *Politics and Society* 21, no. 4 (1993); Ariel Salzman, *Tocqueville in the Ottoman Empire: Rival Paths to the Modern State* (Boston: Brill, 2004).

some occasions, these leases included the right to open the forest up for cultivation.⁷⁹ Though the central administration instituted the *malikane* system as an attempt to cope with the late seventeenth century crisis of tax farming,⁸⁰ it seems that the institution bestowed upon the owners some certain self-conveyed rights to the forest lands. For one thing, however, the great landowners of the eighteenth century might have increased the deforestation rates due to a desire to gain more profit from agriculture. However, we do not know much about the activities of landless peasants and sharecroppers with respect to landholders. Their response to changing economic and environmental conditions is crucial to understanding changes in land use and forest clearances in particular. These people without land might have relied on opening up the forests to slash-and-burn agriculture for their means of subsistence.

1.4. Expansion and Crisis in the Pre-Industrial Period

The fiscal structure and agrarian economy of the pre-industrial Ottoman state, as manifested in the tax farming (*iltizam*) and lifetime farming out (*malikane*) systems are usually analyzed within the framework of the centralization-decentralization duality. This dichotomy is usually based upon a negative approach to the seventeenth century crisis, which began in fact during the later sixteenth century. During this time, the very basic *timar* system deteriorated and was replaced with the *iltizam* (tax farming) system. Upon the deepening of the crisis in

⁷⁹ BOA, *IAD*. 2/245 (El. Z 1158/14/23 January 1746). *İstanbul Ahkâm Defterleri. İstanbul Tarım Tarihi 1*, edited by Ahmet Kal'a et al., İstanbul Külliyyatı IV (İstanbul: İstanbul Araştırmaları Merkezi, 1997), p. 112.

⁸⁰ Suraiya Faroqhi, "Crisis and Change, 1590-1699," in *An Economic and Social History of the Ottoman Empire, 1300-1914*, ed. H. İnalcık and D. Quataert (Cambridge and New York: Cambridge University Press, 1994).

the late seventeenth century, however, the *malikane* (lifetime tax farming) system replaced the *iltizam*, and finally the measures imposed by the central government to solve the military and fiscal problems and to curb the increasing power of the local dignitaries resulted in the rise of the *ayan* (local magnates) in the eighteenth century.⁸¹

By comparison, Salzman argues that the pre-industrial Ottoman state represented a particular fisco-political conjuncture, in which “the privatizing fiscal policies and decentralized apparatus of the eighteenth century facilitated the transition between a precocious imperial centralization of the fifteenth-sixteenth century and the peculiar institutional centralization that ushered in the modern state in the early nineteenth century.”⁸² Though a pretentious argument, it still affirms the above-mentioned duality and instead of discussing the inherent limits of such a bifurcation, it elaborates on it further thus implying another bifurcation. On the

⁸¹ Halil İnalçık, “Military and Fiscal Transformation in the Ottoman Empire, 1600-1700,” *Archivum Ottomanicum* VI (1980): passim. Beginning with a couple of pioneering studies, a new paradigmatic shift began to challenge this so-called ‘decline paradigm’ as well as the centralization-decentralization dichotomization. Important examples are: Cornell H. Fleischer, *Bureaucrat and Intellectual in the Ottoman Empire: The Historian Mustafa Ali (1541-1600)* (Princeton, N.J.: Princeton University Press, 1986). Rifa at Ali Abou-El-Haj, *Formation of the Modern State: The Ottoman Empire, Sixteenth to Eighteenth Centuries* (Albany, N.Y.: SUNY Press, 1991). Isenbike Togan, “Ottoman History by Inner Asian Norms,” in *New Approaches to State and Peasant in the Ottoman Empire*, ed. Halil Berktaş and Suraiya Faroqhi (London: Frank Cass, 1992). Salzman, “An Ancien Regime Revisited: ‘Privatization’ and Political Economy in the Eighteenth-Century Ottoman Empire.” Linda T. Darling, *Revenue-Raising and Legitimacy: Tax Collection and Finance Administration in the Ottoman Empire, 1560-1660* (New York: E.J. Brill, 1996). Karen Barkey, *Bandits and Bureaucrats: The Ottoman Route to State Centralization* (Ithaca, N.Y.: Cornell University Press, 1994).

⁸² Salzman defines the Ottoman fisco-political order in the ‘ancien regime’ as the partially “privatized” administrative structure which achieved its distinctive fiscal characteristics in the period between 1695 and 1793 and had the system of revenue contracts held for lifetime (*malikane*) as one of its mainstays. For her, this system created diffused but interrelated loci of state power. It was this that sustained the power of the state “knitting center and periphery together over the eighteenth century, and laying the social foundation for the centralizing policies initiated from 1812 onward.” Salzman, “An Ancien Regime Revisited,” pp. 393-395.

other hand, the revenue extraction and distribution of resources have been thus far only considered through the lens of the state's ability or disability to extract and redistribute.⁸³ Considering the administration and management of natural resources, we have to leave aside this centralization and decentralization approach and begin to question the limits of statemaking in the pre-industrial period in relation to natural resource management.

The Ottoman expansion during the fourteenth and sixteenth centuries came to a halt during the seventeenth century. The successes in naval wars in the sixteenth century took a different turn after the defeat at Lepanto in 1571. Until that time, the Ottomans were able to control most of the Mediterranean. About the same time, the Dutch and the English, with their strong merchant fleets, emerged to be the major actors in the Mediterranean and Indian Ocean trade and surpassed the former dominant powers, the Spanish, the Portuguese, the Venetians, and finally the Ottomans. The French entered the scene as a third power later in the sixteenth century. Nevertheless, the Ottomans, though they had retreated from the western Mediterranean, continued to be active in eastern Mediterranean trade up to the eighteenth century. During this period, naval superiority and trade went hand in hand. However, the commercial expansion of England and Holland throughout Mediterranean had a huge impact upon Ottoman naval policies.⁸⁴ This commercial enterprise also increased the gap between the Ottomans and northwestern Europe in the transition from an agricultural economy to an industrial one.

While seeking new natural resources, these powers were able to surpass their geographical boundaries –despite the burdens they imposed upon the colonized lands and the indigenous people– and, thus eliminated some possible bottlenecks of

⁸³ This critique is also valid for Darling's study. Darling, *Revenue-Raising and Legitimacy*.

⁸⁴ Molly Greene, "Beyond the Northern Invasion: The Mediterranean in the Seventeenth Century," *Past and Present* 174, no. 1 (February 2002): passim.

energy supplies.⁸⁵ On the other hand, the Ottoman Empire was to be content with the sources of energy within its own territorial limits. This self-reliance became a more critical issue when territorial expansion came to an absolute end in the late seventeenth century. Nevertheless, there is not much evidence for arguing that a crisis occurred due to overexploitation of natural resources in the Ottoman state. Contemporary travelers point out that the Ottomans were capable of providing all the sources necessary for shipbuilding within their borders.⁸⁶ Apparently, this ability continued until the first half of the nineteenth century. But if we reconsider the turbulence of the late sixteenth and early seventeenth centuries, we will notice that one major symptom of the transformation of state and society was the emergence of considerable pressure on the use and management of natural resources. The growing demand for cash money by the Ottoman state encouraged aggressive administrative and fiscal mechanisms (such as tax farming) to exploit natural resources. Although the Ottoman state and society continued to change after this period, only a limited degree of development could be observed in manufacturing and industry.⁸⁷

⁸⁵ For the environmental history of different colonial contexts, see: Anne Godlewska and Neil Smith, eds., *Geography and Empire* (Oxford: Blackwell, 1994); Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860* (Cambridge and New York: Cambridge University Press, 1995); Grove, Damodaran, and Sangwan, eds., *Nature and the Orient: The Environmental History of South and Southeast Asia*; John M. MacKenzie, ed., *Imperialism and the Natural World* (Manchester: Manchester University Press, 1990).

⁸⁶ Greene, "Beyond the Northern Invasion."; Colin Imber, *The Ottoman Empire, 1300-1650: The Structure of Power* (Basingstoke: Palgrave Macmillan, 2002); Robert Mantran, *L'empire Ottoman du XVI^e au XVIII^e Siècle: Administration, Économie, Société* (London: Variorum, 1984).

⁸⁷ On the manufacturing and industry in the pre-industrial period, see: Michael R. Palaret, *The Balkan Economies C. 1800-1914: Evolution without Development* (Cambridge and New York: Cambridge University Press, 1997); Sevkət Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913: Trade, Investment, and Production* (Cambridge and New York: Cambridge University Press, 1987); Socrates Petmézas, "Patterns of Protoindustrialization in the Ottoman Empire: The Case of Eastern Thessaly, ca. 1750-1860," *Journal of European*

Overseas expansion coincided with the development of intensive land use in the northwestern capitalist economies. Spain and Portugal adopted this new technology in the fifteenth century and later Britain and the Dutch developed it fully in the seventeenth century. Meanwhile, France followed their example once her internal turmoil had subsided.⁸⁸ In this context, the European peasantry gradually shifted from subsistence agriculture to cash crop agriculture, which meant a further devastation of forests in the early modern era.⁸⁹ However, in the Ottoman Empire, though there was a tendency toward cash crop agriculture in the nineteenth century, extensive agriculture remained the dominant form of land use until the twentieth century.

Coupled with a significant population growth, this extensive land use also affected the forests and marginal lands throughout the Empire. The population had almost tripled in Anatolia from the sixteenth to the nineteenth centuries. In Istanbul, the population grew nine fold in the sixteenth century, compared to what it had been in 1453.⁹⁰ Population growth increased the demand for forest products, and this in turn stimulated overexploitation of forest resources. This tendency became

Economic History 19, no. 3 (1990); Donald Quataert, *Manufacturing in the Ottoman Empire and Turkey, 1500-1950*, Suny Series in the Social and Economic History of the Middle East (Albany, NY: State University of New York Press, 1994).

⁸⁸ For a summary and evaluation of works on these transformations in the pre-industrial period, see: Robert S. Duplessis, *Transitions to Capitalism in Early Modern Europe* (Cambridge: Cambridge University Press, 1997).

⁸⁹ Williams, *Deforesting the Earth*, p. 160.

⁹⁰ Stefanos Yerasimos, *Az gelişmişlik Sürecinde Türkiye: Tanzimat'tan I. Dünya Savaşına* vol. II (İstanbul: Belge Yayınları, 2001 [c1974]), p. 15. On Ottoman population and demography, see: Cem Behar, *Osmanlı İmparatorluğu'nun ve Türkiye'nin Nüfusu, 1500-1927 [the Population of the Ottoman Empire and Turkey]*, ed. Cem Behar, *Tarihi İstatistikler Dizisi*, vol. 2 (Ankara: T. C. Başbakanlık Devlet İstatistik Enstitüsü, 1996); Kemal H. Karpat, *Ottoman Population, 1830-1914: Demographic and Social Characteristics* (Madison, Wis.: University of Wisconsin Press, 1985); Oktay Özel, "Population Changes in Ottoman Anatolia During the 16th and 17th Centuries: The 'Demographic Crisis' Reconsidered," *International Journal of Middle East Studies* 36 (2004).

intensified by the domination of tax farming practices and the increasing demand of the military and naval institutions on forest products. Consequently, this process put more pressure on natural resources. All these point to the significance of the natural resource use and its effects on the larger social, economic, cultural, and political context.⁹¹

In brief, the ‘seventeenth century crisis’ in Europe and the Ottoman Empire, besides its side effects in the economy and society, resulted in the transformation of the natural habitat and land use. The change of forest cover was a central aspect of this bigger transformation, which occasionally resulted in a decrease in timber resources. For the northwestern European states, the “sometimes real but sometimes imaginary” scarcity of wood hastened the search for and exploitation of other forest resources first in the European periphery, and then overseas.⁹² The Ottoman state, however, remained self-sufficient for a long time due to its comparative advantage of having local access to all the raw materials and labor for shipbuilding.⁹³ This peculiarity of the Ottoman Empire was mentioned in some of the eighteenth century sources:

Not all the Kingdoms of the Christian World, thou’d they resolve to join their Forces, and partake promiscuoufly of one anothers Bleffings, cou’d afford conjointly more Materials for Maritime Improvements, than grow commodiously within the beckon of the Turks Metropolis; for round the Shores whose ragged Cliffs encompass the Euxine or Black Sea, stand endless Numbers of Tall Woods, whose stately Timber fell’d for Use,

⁹¹ For the new administrative/governmental problem caused by the population problem, see: Michel Foucault and others, *Sécurité, territoire, population: cours au Collège de France, 1977-1978* (Paris: Seuil, 2004).

⁹² Williams, *Deforesting the Earth*, p. 146. For a discussion of the history of wood scarcity in Germany, see: Joachim Radkau, “Wood and Forestry in German History: In Quest of an Environmental Approach,” *Environment and History* 2 (1996).

⁹³ Imber, *Ottoman Empire, 1300-1650*: passim.

supply the City thro' the Thracian Bosphorus, with the finest Wood requir'd for Building.⁹⁴

Likewise, several manuals and reference books providing specific information on commercial treaties and regulations, and statistics on agriculture, manufactures, industry, trade, and natural resources of European countries usually included information on the commercial capabilities of Ottoman forests. For example, a late eighteenth-century source emphasized that: "Notwithstanding the vices of its government, there is no state has more resources than Turkey, because the land is almost everywhere so fertile that it abounds in materials and men."⁹⁵ Although resources seemed to be endless, in practice the Ottoman state encountered many difficulties in efforts to exploit its forests to become a naval power in the sixteenth century.

1.5. Shipbuilding and the Navy

Timber played an important strategic role for many maritime powers like Venice, Holland, England, and France, as well as the Ottoman Empire.⁹⁶ The

⁹⁴ Aaron Hill, *A Full and Just Account of the Present State of the Ottoman Empire in All Its Branches: With the Government, and Policy, Religion, Customs, and Way of Living of the Turks* (London: 1709. Eighteenth Century Collections Online. Thomson Gale 2006. <http://galenet.galegroup.com/servlet/ECCO>), pp. 29-30.

⁹⁵ Vincent Mignot, *The History of the Turkish, or Ottoman Empire, from Its Foundation in 1300, to the Peace of Belgrade in 1740*, trans. from the French by A. Hawkins, 4 vols., vol. 2 (Exeter: 1787. Eighteenth Century Collections Online. Gale Group. <http://galenet.galegroup.com/servlet/ECCO>), p. 167.

⁹⁶ For a general discussion of shipbuilding between the sixteenth and eighteenth centuries, see: Y. Eyüp Özveren, "Shipbuilding, 1590-1790," *Review* 23, no. 1 (2000). For an analysis of the Ottoman maritime power and shipbuilding enterprise between the fifteenth and nineteenth centuries, see: Eyüp Özveren and Onur Yıldırım, "An Outline of Ottoman Maritime History," in *New Directions in*

availability and prices of shipbuilding timber determined the destiny of all navies of the pre-industrial period. For example, the rise of the Dutch and the decline of Venetian maritime powers in the sixteenth and seventeenth centuries were closely bound to supply and prices of oak, while the supply of conifers did not seem to be a major problem.⁹⁷ On the other hand, the Ottomans became a maritime power during the sixteenth century by securing “permanent access to the resources for shipbuilding, cannon founding, crew mobilization, and provisioning.”⁹⁸ Following this development, the imperial shipyard needed large quantities of timber for shipbuilding and, consequently, exploited forest supplies probably much more than any other human factor. Indeed, it seems to have been the most important agent of deforestation in the pre-industrial period, especially in the coastal forests.

Constructing wooden warships required vast amounts of wood. For example, in Venice, in order to build one galley almost 300 hectares of oak forest and 122 hectares of conifer forest were used if the method of selective cutting was applied, while 2-3 hectares and 2 hectares respectively were needed if the clear cutting method was adopted.⁹⁹ On the other hand, the construction of an Ottoman galley required roughly 7,000-10,000 units of timber costing, in the mid-seventeenth century, between 56,000 and 86,000 *akçes*.¹⁰⁰ By this time, there seemed to be 300-400 galleys in the Ottoman fleet, whereas at least forty galleons were to be present according to the rules of the time.¹⁰¹ The Ottoman galleon-with-three-decks, about

Mediterranean Maritime History, ed. G. Harlaftis and C. Vassalo (Newfoundland: St. John's, 2004).

⁹⁷ Agnoletti, “Introduction,” p. 3.

⁹⁸ Özveren and Yıldırım, “Ottoman Maritime History,” p. 153.

⁹⁹ Agnoletti, “Introduction,” p. 4.

¹⁰⁰ Özveren and Yıldırım, “Ottoman Maritime History,” p. 165.

¹⁰¹ İdris Bostan, *Osmanlı Bahriye Teşkilâtı: XVII. Yüzyılda Tersâne-i Âmire* (Ankara: Türk Tarih Kurumu, 1992), p. 97fn. 174; İsmail Hakkı Uzunçarşılı,

52.5 meters, required 48,244 pieces of timber, large and small, in the eighteenth century.¹⁰² Although the Ottoman galleys were less suitable for open-sea warfare than their counterparts were, these figures might give an incomplete idea about supplying timber for the Ottoman ships. Many of the Mediterranean countries imported (except for the oak which is indigenous to Europe) fir, pitch, tar, turpentine, hemp, and flax from the Baltic regions.¹⁰³ The Ottoman Empire was better off in this period when it came to supplying the necessary materials for shipbuilding. However, the Ottoman ambition of building a stronger navy in the Mediterranean led to searches for new timber resources. In the sixteenth century, a need to build new ships led the government to explore the lands of the Empire in search of large trees available in sufficient quantity and conditions for facilitating their transportation.¹⁰⁴ Gradually, the government adopted the policy of reserving extensive forests for the Imperial Shipyard and Arsenal.

These forests were mostly situated close to the Black Sea, the Sea of Marmara, the Aegean Sea, and the Mediterranean. For instance, the forests of the subprovince of Kocaeli provided the majority of timber materials for the Imperial Shipyard. But for masts, the Ottomans occasionally exploited distant and diverse sources of supply such as Albania, Carpathian and Taurus Mountains.¹⁰⁵ Moreover,

Osmanlı Devletinin Merkez ve Bahriye Teşkilâtı (Ankara: Türk Tarih Kurumu, 1988), p. 444.

¹⁰²HK, *Doc. No. 81* (3 C 1165/18 April 1752). According to the 1797 edition of *Encyclopedia Britannica*, “a large warship [galleon] about a thousand tons required between 1400 and 2000 oak trees, each at least 100 years old, which could not have grown on less than 16-20 hectares of woodland; three masts of up to 130 ft [39.6 m.] and numerous spars.” Williams, *Deforesting the Earth*, p. 193.

¹⁰³ Williams, *Deforesting the Earth*, p. 193.

¹⁰⁴BOA, *MD. 3/596* (7 Ra 967/7 December 1559). Eftal Şükrü Batmaz, Bekir Koç, and İsmail Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I [Documents on Ottoman Forestry - I]*, T. C. Orman Bakanlığı Yayın Dairesi (Orman Bakanlığı Yayın No: 094) (Ankara: 1999), pp. 4-5.

¹⁰⁵ Özveren and Yıldırım, “Ottoman Maritime History,” p. 163.

the timber from the mountains of Maraş was used by the Birecik and Basra shipyards for the construction of fleets in the sixteenth century.¹⁰⁶ The government also sent enough timber from the forests in Konya-Karaman region for the construction of ships in the Egypt shipyard.¹⁰⁷ In Rhodes, there was an important yard, in which the pines of the island and the timber brought from the coasts of Konya province were used to build ships.¹⁰⁸ However, one of the contemporaries, Habesci, claimed that though these ships were technically substandard, their practical use was superior to that of the European ships of the period. The underwater hulls of the ships were made completely of oak, while the upper parts were built of fir to make them lighter and safer, since fir did not crumble in splinters during combat as oak did. However, the major problem was the rapacity of the builders and contractors. For example, the builders might use decayed wood and fissured planks in the concealed parts of the ship. The contractors, on the other hand, could make considerable profit by substituting soft wood pegs for hard wood or large iron nails. Rather than using a monolithic mast, the builders could join several pieces of wood one above the other, thus making a crucial component of the ship unstable. Habesci claimed that such frauds made the Ottoman ships less durable than European ships.¹⁰⁹

Local shipping activities on these islands were a serious cause of the destruction of coastal forests. Thus, the central government sometimes tried to

¹⁰⁶ “Maraş,” in *Encyclopedia of Islam*, ed. H. A. R. Gibb et al (Leiden: Brill, 1960-). HK, *Doc. No. 375* (28 M 967//29 October 1559).

¹⁰⁷ Ömer Lütü Barkan, *XV-XVI inci Asırlarda Osmanlı İmparatorluğunda Ziraî Ekonominin Hukukî ve Malî Esasları* (İstanbul: İstanbul Üniversitesi Yayınları, 1943), p. 9.

¹⁰⁸ Henry Alexander Scammell Dearborn, *A Memoir of the Commerce and Navigation of the Black Sea, and the Trade and Maritime Geography of Turkey and Egypt*, 3 vols., vol. 2 (Boston: 1819), p. 358.

¹⁰⁹ Elias Habesci, *The Present State of the Ottoman Empire*, translated from the French Manuscript (London: 1784), pp. 242-45.

control the felling by local shipbuilders and to monopolize the exploitation of forests. Nevertheless, the local shipbuilding activities probably decreased to a certain extent when the activities and range of piracy broke down due to the further consolidation of the early modern states from the last quarter of the seventeenth century onwards.¹¹⁰

The Imperial Shipyard needed special types of timber for the hull, mast, and beam. The necessary timber baulks and other non-timber forest products used in construction were cut down from the forests close to these shipyards, since this made transportation easier.¹¹¹ It should be noted that from the beginning of naval construction until the nineteenth century, the Ottoman state remained unable to exploit marginal forests mainly due to the lack of an efficient network of transportation.

The logistics of acquisition and transportation of forest products necessitated a special administrative, fiscal, and social institution, imposed on coastal and some inland regions. The core institution was the *ocaklık*. It consisted of a unit of fiscal tax, paid in kind or in cash. The subject peasants, or nomads, in these *ocaklıks* were arranged in numbers to form a unit. They owed the government either a service, such as felling or transportation, or cash payment.¹¹² The government required the peasants to supply the necessary forest products for the shipyards as *ocaklık* in return for their *avarız*-tax payments. Moreover, nomads were mobilized for felling and transporting timber from the mountains to the coastal regions in return for tax exemptions.¹¹³

¹¹⁰ Greene, "Beyond the Northern Invasion," p. 63.

¹¹¹ Uzunçarşılı, *Merkez ve Bahriye Teşkilâtı*, p. 446.

¹¹² Bostan, *Osmanlı Bahriye Teşkilâtı*, passim.

¹¹³ Ibid., passim; Uzunçarşılı, *Merkez ve Bahriye Teşkilâtı*, passim. On the *ocaklık* system, also see: Halil Cin, *Osmanlı Toprak Düzeni ve Bu Düzenin Bozulması* (Ankara: T. C. Kültür Bakanlığı, 1978).

All the materials that were needed by these shipyards were collected each year from designated *ocaklıks*. The government sent dispatches to the *kadis* (judges) and other local officials of the districts who were supposed to supervise the process. We encounter many documents in the archive, which told the local officers and judges of districts that the shipyard was short of timber and demanded that they send the necessary materials immediately.¹¹⁴ The forests close to the shipyards were the natural resource locations for timber and non-timber forest products. For instance, the forests in Samsun and Kastamonu were defined as the *ocaklık* of the Sinop shipyard. Other non-timber materials, like pitch, tar, and resin, came from the *ocaklıks* in the northern Black Sea region.¹¹⁵ The same was true for the Alaiye and Payas forests, serving the yard of Antalya, or the subprovinces (*liva*) of Kocaeli and Bursa, and various other regions in Anatolia and Rumelia of Istanbul.¹¹⁶

Local people did not always readily accept the *ocaklık*-obligations. In fact, *ocaklık* peasants occasionally resisted the state's demand, especially when construction efforts increased due to wars, leading off a work load that was difficult for the population to bear. From the beginning of this system of logistics, the fixed prices of the *ocaklık* raw materials consisted of about one-fifth of the real prices. The *ocaklık* peasants paid the remaining four-fifth as part of their *avarız*-tax obligation.¹¹⁷ Bostan's findings reveal that neither the amount of timber nor the prices changed during the entire seventeenth century,¹¹⁸ despite the fact that this

¹¹⁴ HK, *Doc. No. 56* (1001/1592-93); HK, *Doc. No. 58* (El. Za 1002/19-28 July 1594); HK, *Doc. No. 61* (9 C 1016/1 October 1607).

¹¹⁵ By the early sixteenth century, there was already a developed trade in all types of forest products between the Black Sea coast with its forested hinterland, and Istanbul. Faroqhi's findings display that the majority of imported items from Amasra and Bartın (northern Black Sea ports) to Istanbul consisted of wood and timber, walnuts, and linseed oil. Faroqhi, *Towns and Townsmen*, p. 76.

¹¹⁶ Uzunçarşılı, *Merkez ve Bahriye Teşkilâtı*, pp. 448-49.

¹¹⁷ Bostan, *Osmanlı Bahriye Teşkilâtı*, p. 108.

¹¹⁸ *Ibid.*, p. 105.

century was fraught with inflation and devaluation of coins.¹¹⁹ In 1695, the government held a new timber survey and redefined the *ocaklıks*. Some districts in the *liva* of Kocaeli began to pay their *ocaklık* in cash instead of in kind. About 21 percent of the total *ocaklık* was paid in cash and 79 percent in kind and an extra 188,925 *akçes* (aspers) was extracted in lieu of the *avarız*-tax payments.¹²⁰

The government held the *kadı* or the *timarholder* of the *ocaklık* region responsible to control the government funds (*miri akçe*), which were transferred to the *kereste emini* (timber superintendent) and *mübaşir* (agent), who was to pay whole money to the loggers and transporters.¹²¹ Despite the government's assumed 'monopoly' over the reserved forests of the shipyard, it is obvious that this dominance did not provide it with effective means to control the prices in the market. The huge discrepancy in prices created conditions of material hardship, and forced peasants to search for better opportunities. The easiest way was to sell their forest products to merchants (who usually paid more than the government), though it was contrary to peasants' obligations.¹²² Such informal selling forced the Imperial Shipyard to buy the shipbuilding materials directly from the market, when there was an urgent need.¹²³

The major difference between market price and the amount paid by the state as well as conditions of material hardship led the rural population to violate the

¹¹⁹ For an analysis of these issues, see especially: Şevket Pamuk, *A Monetary History of the Ottoman Empire* (Cambridge, UK and New York: Cambridge University Press, 2000), passim; Şevket Pamuk, "Institutional Change and the Longevity of the Ottoman Empire, 1500-1800," *Journal of Interdisciplinary History* 35, no. 2 (2004): passim.

¹²⁰ Bostan, *Osmanlı Bahriye Teşkilâtı*, p. 108 and fn221.

¹²¹ *Ibid.*, passim.

¹²² *Ibid.*, p. 109.

¹²³ *Ibid.*, p. 101.

rules imposed by the administration.¹²⁴ For example, the peasants, gypsies, and nomads who were responsible for cutting and transporting timber for the Imperial shipyard occasionally extracted timber illegally from the reserved forests. Though it was a reason for conflict with the government, the local people needed wood and timber to support their livelihood. However, the government sent many dispatches to local administrative officials to prevent damage done by these people to the supplies of the shipyard.¹²⁵ For the central administration, such trespasses meant the eventuality of subsequent shortages of timber. The merchants from which the Shipyard bought timber and the local people that cut timber from reserved forests on their own played a crucial role in the exploitation of forests.

Some decrees from the second half of the sixteenth century indicate that the Ottoman government was occasionally threatened by timber scarcity. For example, an order sent by Sultan Suleiman I to the *kadı* of Gelibolu in Sept-Oct 1565, inquired about the volume of timber suitable for galley construction that was siphoned by intruders. The order also asked the *kadı* to prevent further felling of trees within nearby forests.¹²⁶ In the same document, it was also stated that certain individuals were taking the possession of *miri* estates, and the *kadı* was asked to prevent such illegal transfers of land. He was also asked to inform the names of these people and the amount of disposed lands and the means of having acquired them, since these transfers might have included forest lands as well. Next month, another decree was sent to Piyale Paşa, the first *Kapudan-ı Derya* (High Admiral of

¹²⁴ To illustrate this, an example from an Ottoman *hüküm* might be useful. According to this document, the discrepancy between the merchant price and state price could be as high as fivefold in 1682. For example, the merchant price of *vürdinar-ı bellut* was 325 *akçes*, whereas the state price was 65 *akçes*. On the other hand, the merchant price of *tahta-i kalyon* was 175 *akçes* as opposed to the 35 *akçes* for the state price. Source: *Ibid.*, p. 109.

¹²⁵ HK, *Doc. No. 374* (28 Z 966/1 September 1559).

¹²⁶ BOA, *MD. 5/427* (Ra 973/26 Sept-25 Oct. 1565). Quoted in: Uzunçarşılı, *Merkez ve Bahriye Teşkilâtı*, p. 395fn3.

the Navy) of the Ottoman Empire, asking immediately to provide necessary construction materials for the enlargement of the shipyard in Istanbul in order not to be affected from a shortage of timber.¹²⁷

Another major cause of concern for the timber supplies was the improprieties of the timber officials, who were responsible for the provisions of the shipyards. One of them is worth mentioning. We learn from a document that after some peasants felled the assigned timber from the reserved forests of Izmid and transported to the port, the superintendent of the shipyard told them that it was not good timber and not suitable for the shipyard. He told them to take back the timber with them. The peasants, on the other hand, pressured by the demand of the superintendent yet dreading the possibility of returning empty-handed to their villages, decided to sell the timber to a person, located in Izmid, for a cheaper price. What the peasants did not know was that there was already a private agreement between the official and this person. The official gave the person a certain amount of money beforehand and sold it to the state at the fixed price, profiting from the difference. Upon revealing this fraud, the government sent an inspector to take the necessary measures to protect peasants from such felonies and to maintain the rights of the central treasury.¹²⁸ This incident indicates that many such timber officials became contractors themselves. It also shows that the provisioning of the shipyards was a lucrative business for some greedy local officials.

State claims over forest resources frequently collided with the pursuit of profit by merchants and military establishment. These resources provided great opportunities for the enrichment of local powerholders and military personnel who engaged in timber trade. The government periodically sent inspectors to the

¹²⁷ BOA, MD. 5/446 (R 973/26 Oct.-23 Nov. 1565). Quoted in: Bostan, *Osmanlı Bahriye Teşkilâtı*, p. 17; Uzunçarşılı, *Merkez ve Bahriye Teşkilâtı*, p. 396fn1.

¹²⁸ BOA, MD. 6/799 (28 B 972/1 March 1565). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 16-17.

reserved forests of the shipyard to prevent unauthorized cuttings. However, the forest guards were largely incapable of preventing encroachments by the local powerholders and military officials. For example, the *timar*holders and janissaries of Vize (Thrace) felled trees in the montane forests by overcoming the authority of the *korucu* (forest guard) and the *kadı*. Since this was considered a transgression of the state's right over these forests, the Sultan asked the *kadı* to name those who failed to obey orders.¹²⁹

These groups might have established partnerships with local peasants as well. For example, some janissaries from Midye (Kıyıköy) arranged to have some peasants cut timber from the reserved, delimited, and protected forests at the Istranca Mountains, in violation of the forest guard's commands. The guard then applied to the governor-commander of Vize, who then went to investigate the affair. Upon initial inquiry, he observed that 8,000 pieces (*kit'a*) of timber were awaiting transportation. The apparent owner of these trees told the governor-commander that he had bought them from the *levends* (irregular soldiers) settled in these forests. The governor sent four of his private militia to summon the squatters to the *kadı*-court (*meclis-i şer'*). When the militia arrived at the forest, they found a group of *levends* felling trees on their own. After a confrontation, the militia was able to capture three of them, but one of them escaped and informed his compatriots about the incident. Some of the local peasants and a group of janissaries together rushed upon the militia, rescued their captured friends, and seized two members of the militia. When the news arrived in Istanbul, it roused considerable anger among the government members. The Sultan ordered the *kadı* and one of his halberdiers (*teberdar*), a certain Hüseyin, to arrest these rebels, who were resisting Sultanic orders by felling and selling timber illegally. The officials were to confiscate the timber and after the *kadı* classified and recorded them into a

¹²⁹ BOA, MD. 3/1494 (20 Z 967/11 September 1560). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 6-7.

register (*defter*), they were to be sent directly to Istanbul.¹³⁰ The above incidents exemplify the strategic importance that timber played in imperial shipbuilding.

After encountering such problems and violations, on 8 April 1697, the Grand Vizier Amcazade Hüseyin Paşa ordered to revoke the authority of superintendents of the shipyard in the provisioning of the Imperial Shipyard. The primary aim of this action was to prevent frauds and improprieties, though another aim was to be the protection of the peasants from arbitrary claims. From this time onward, Hüseyin Paşa ordered that the agents of government sent from the center, who would perform three years in office in each region, handle the provisioning process.¹³¹ The timing of this renovation shows that the financial policies and land use, like the lifetime tax farming and conversion of extraordinary taxes to regular ones, had a direct effect on the administration of naval affairs. This is also attributed to the breakdown of the traditional provisioning institutions and practices of the state.¹³² Subsequent reorganizations within the Shipyard continued until the nineteenth century, especially during the reign of Selim III, but none of them was able to eliminate the vicious circle of supplying the Shipyard with necessary timber.

Around the 1820s and 30s, the last remnants of the earlier provisioning system were destroyed. Except for the thirteen districts in the subprovince of Kocaeli, the former *ocaklık* system was also abolished. Apparently, the reason for this decision was failure to convey trees for the construction of galleon-with-three-decks on time. From then on, the government entrusted the supply of the Shipyard to naval contractors in the provinces, who were probably the local powerholders

¹³⁰ BOA, *MD. 6/949* (30 N 972/1 May 1565). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 18-19.

¹³¹ Bostan, *Osmanlı Bahriye Teşkilâtı*, p. 107.

¹³² Özveren and Yıldırım, "Ottoman Maritime History," p. 157. The authors argue that "the effects of growing impediments to the procurement of necessary supplies from the provinces through the traditional provisioning system, coupled with the mounting problems of negligence and corruption in the administration, put the Ottoman navy at a disadvantage compared to its rivals."

and their agents.¹³³ The subsequent role of these naval contractors in the supply of timber is of importance in its own right, because the business became one of a ‘public service’ on the one hand, and ‘private interest’ on the other.¹³⁴

1.6. Provisioning of Istanbul

The provisioning of urban centers was one of the main concerns of the Ottoman state.¹³⁵ However, in the pre-industrial period, transportation was very slow and expensive, thus making provisioning of large cities rather difficult. Moreover, wood is a bulky commodity, thus its transportation necessitated mobilizing large numbers of human and animal resources. But thanks to the seaborne access to wood production centers, Istanbul had a comparative advantage.

The Ottoman government monopolized the firewood supply to Istanbul. Head doorkeepers (*kapucıbaşı*) were often appointed to the major centers of production to prevent the intervention of intermediaries. These intermediaries consisted of not only merchants and contractors but also of local governmental and military

¹³³ Halil Kutluk, ed., *Türkiye Ormancılığı ile İlgili Tarihi Vesikalar, 893-1339 (1487-1923)*, T. C. Tarım Bakanlığı Orman Genel Müdürlüğü Yayını, No: 56 (İstanbul: Osmanbey Matbaası, 1948), pp. 110-46, passim.

¹³⁴ On the role of French naval contractors: Paul W. Bamford, *Forests and French Sea Power, 1660-1789* (Toronto: University of Toronto Press, 1956); Hamish Graham, “Profits and Privileges: Forest and Commercial Interests in Ancien Régime France,” *French History* 16, no. 4 (2002).

¹³⁵ The supply of grain constituted the majority of studies on the provisioning of Istanbul. Lütfi Güçer, *XVI.-XVII. Asırlarda Osmanlı İmparatorluğunda Hububat Meselesi ve Hububattan Alınan Vergiler* (İstanbul: İstanbul Üniversitesi Yayınları, 1964); Lütfi Güçer, “XVIII. Yüzyıl Ortalarında İstanbul’un İaşesi İçin Lüzumlu Hububatın Temini Meselesi,” *İstanbul Üniversitesi İktisat Fakültesi Mecmuası* XI (1949); Lynne M. T. Sasmazer, “Provisioning Istanbul: Bread Production, Power, and Political Ideology in the Ottoman Empire, 1789-1807” (Ph.D. Thesis, Indiana University, 2000). Wood provisioning, being not less important than the grain and other essential products for the sustenance of urban populations, has been unfortunately neglected in the historiography.

officials, even from the lowest ranks. At the time of timber shortages in Istanbul, the government sent immediate orders to the local timber officials to supervise the fellings and the transportation, which were essentially relegated to local people, who carried wood with their own pack animals by the cartload to the nearest ports. From there ships and boats took turns transporting the freight to the *Odun İskelesi* (Wood Pier) in Istanbul. The rotation of transportation was strictly supervised by timber officials.¹³⁶ Since the provisioning of Istanbul was a huge undertaking, the city was occasionally threatened by firewood shortage. Maybe the most severe threat occurred during the winter of 1804, when the government ordered the *kapucıbaşı* Emin Ağa located at Çingane İskelesi to provide 450,000 cartloads (not less than 112,500 metric tons) of firewood from the forests of Sergen, Vize, Kırkkilise, Ruskasrı, Missivri, and Ahyolu. Emin Ağa was warned that it was a matter of public service (*amme hizmeti*) which should not be confused with any other affair.¹³⁷

In the late fifteenth century, the districts of Izmid, Gebze, and Yalova were expected to supply the Palace and the Imperial kitchen annually with firewood. The palace was the largest household in Istanbul, and it consumed enormous amounts of firewood and charcoal. This consumption was regulated by a special section in the *Kavanin-i Osmaniyan* drafted by Celalzade, the famous *Nişancı* of the sixteenth century, during the reign of Suleiman I.¹³⁸ According to this regulation, the districts of Iznik, Yalova, and Gebze were to provide the palace with 32,000 *vezne* (about 370 metric tons) of firewood each year before winter. The district *kadis* were responsible for supervising the felling, transportation, and shipment of wood within

¹³⁶ HK, *Doc. No. 74* (Et. S 1140/28 Sept-7 Oct 1727). *İstanbul Ahkâm Defterleri. İstanbul Ticaret Tarihi 1*, ed. Ahmet Kal'a et al., İstanbul Külliyyatı III (İstanbul: İstanbul Araştırmaları Merkezi, 1997), pp. 117-118, 157-58, 240-42.

¹³⁷ BOA, *C. BEL. 155* (Za 1218/February 1804).

¹³⁸ Ahmet Akgündüz, *Osmanlı Kanunnâmeleri ve Hukuku Tahlilleri*, vol. I-IX (İstanbul: 1990-1999), vol. 4, part 1, pp. 401.

two months following notice. A certain amount of money was paid out of the Imperial treasury to the peasants who cut and transported the items to the port. Other high or low ranking state officials in Istanbul were to buy firewood from timber merchants themselves. They were not allowed to exert force by using their administrative power while purchasing their household needs.¹³⁹ From the nineteenth century documents, however, we see that the Palace had been purchasing the necessary wood and timber for a five-year period at a fixed price. For the period between 1825 and 1830, 11,000 tons (120 *akçe* per ton) of firewood and 275 tons (240 *akçe* per ton) of baulks were bought for the palace Wood Storehouse (*Hatab Anbarı*).¹⁴⁰

The government carefully supervised the firewood supplies of other towns and cities as well. For example, when the governor-general of the Uzeyir (*vilayet* of Adana) district neglected the supplies for Cyprus in February 1571, the government sent a dispatch stating that he was to send the touchwood (*çıra*) and other firewood to the island immediately.¹⁴¹ Since the government also feared the possibility of delays in provision and possible shortages during winters, it sought to prevent smuggling, black market transactions, and the export of firewood abroad. For example, in 1564-65 a female Jewish merchant (“*bir Yahudi avreti*”) attempted to smuggle around seventy thousand barrel staves to France. When the news reached to the Palace, the Sultan ordered the *kadı* of Gallipoli, the Superintendent of the Imperial Customs (*İhtisab Emini*), and the military commanders of castles at the Bosphorus to seize the ship with its commodities and immediately have them sent back to Istanbul.¹⁴²

¹³⁹ Ibid.

¹⁴⁰ HK, *Doc. No. 139* (Z 1245/May-June 1830).

¹⁴¹ BOA, *MD. 12/41* (22 N 978/17 February 1571). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 28-29.

¹⁴² BOA, *MD. 6/601* (8 C 972/11 January 1565). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 12-13.

The provisioning of Istanbul with timber for construction purposes following large fires was much more difficult than providing fuel. Fires regularly burnt down houses and shops in the city. Until the second half of the sixteenth century, there was no written standardization for the lumber used in constructions. With the initiation of Mimar Sinan, the chief architect of the Palace, the government issued a decree detailing the dimensions and measures of all kinds of timber to be used in construction.¹⁴³ Prior to this period, it seems that much of the timber of this kind had been wasted or sold in the markets for other purposes.

In addition to the major palaces, mosques, bazaars, and inns, the majority of other state buildings and private houses were also built of wood. If the fire brigades failed to extinguish the fire immediately, the wooden buildings were destroyed in a short period due to the severity of the weather conditions. For example, Habesci informed that during the reign of Sultan Mahmud, 12,000 houses were destroyed by one fire, of which “the Sultan finding every effort to prevent the spreading of the flames unsuccessful, at last cried out, that he was convinced the fire came from heaven, and ordered the workmen who were endeavouring to stop it to desist from their useless labour.”¹⁴⁴ The rebuilding efforts in Istanbul after the devastating great fires led the government to take serious precautions in the late seventeenth century in order to prevent major fires in the capital. It was ordered that new houses were to be constructed using brick, plaster, and mud.¹⁴⁵ The reason was based less on the depletion of forests than on the inability of wooden houses to resist fires. The shortage and high price of large timber could very well be a hidden cause underlying this decision as well. However, this claim should be met with caution as baking bricks also consumed large amounts of firewood unless substituted with

¹⁴³ Ahmed Refik, *Hicri On İkinci Asırda İstanbul Hayatı (1100-1200)* (İstanbul: Enderun, 1988), doc. 60, p. 4.

¹⁴⁴ Habesci, *The Present State of the Ottoman Empire*, p. 361.

¹⁴⁵ Ahmed Refik, *Hicri on İkinci Asırda İstanbul Hayatı*, doc. no. 32, p. 21.

coal.¹⁴⁶ Nevertheless, it was still easier and cheaper to provide firewood instead of large timber due to the transportation costs.

Since, the rebuilding of houses and offices after fires was a booming business for some sectors of society, the incendiaries sometimes started fires intentionally. For example, the dealers in building materials, such as timber and nails, were believed to be hiring private agents to set fire to houses.¹⁴⁷ However, Habesci told that the principal incendiaries in Istanbul were the Janissaries. Either for the aim of deposing some unwanted officials or for pillaging the city before joining campaigns, they set fire instantaneously to different parts of the city. For example, before the army marched against the Russians in 1768, they ignited fires in three different quarters of Galata, and raised a considerable sum of money.¹⁴⁸

1.7. Forest Laws and Management

What can be said about the administration and management of forests in the Ottoman Empire in the pre-industrial period? It seems that there was no *kanunname* (law book) specifically drafted for the management, or administration of forests.¹⁴⁹

¹⁴⁶ Williams, *Deforesting the Earth*, p. 200.

¹⁴⁷ Habesci, *Present State of the Ottoman Empire*, pp. 362-63.

¹⁴⁸ Ibid., p. 362. The salary (*ulufe*) of the levends and janissaries ranged between 2.5 to 3 *guruş* per month during this war. They could get also 12 to 25 *guruş* bonus before or during the campaign. Under normal conditions, however, the campaign would cost each soldier 250 *guruş*. In Sinop, for example, a group of janissaries preferred to pay 25 *guruş* to the local judge for an exemption of military service. Virginia H. Aksan, "Whatever Happened to the Janissaries? Mobilization for the 1768–1774 Russo-Ottoman War," *War in History* 5, no. 1 (1998): pp. 32-35.

¹⁴⁹ The *kanunnames* were regulations, which were being appended to the survey registers to regulate and control the process of tax assessment and land distribution in the provinces. They explained the limitations, proportions, and categories of taxes and their conditions of assessment. In general, the *kanunnames* codified the existing practices as well as elucidated newly introduced rules and

Even though there does not seem to have been clear-cut forest laws, there existed a limited protection policy concerning the forests reserved for the needs of major state institutions. The government also aimed to protect crown forests and forests around water resources used by local people. It seems that unofficial hunting in crown forests and excessive local exploitation of strategic forests was the basic reasons of forest protection. Policing measures however were not very efficient for any types of forests. There was a *korucu* ('forest guard') in each forest. These guards were chosen among the veteran janissaries, and apart from the forests, they also supervised the meadows and prairies, attached to the Imperial Stables (*Hass Ahur*).¹⁵⁰ However, they acted only as intermediaries between the central administration and the provincial authorities. Although they could dictate rules and regulations on behalf of the government, in practice they had almost no coercive power. However, in some critical affairs pertaining to military supplies, the government entitled them with extraordinary powers at the expense of local powerholders. The supervision of reserved forests was essentially the duty of administrative officials in the provinces.¹⁵¹

The above-mentioned policy of 'limited' protection can be derived from Ottoman legal sources. However, it is difficult to find too many examples to prove a systematic policy of protection. In fact, except for a few cases from the early nineteenth century, it was impossible to encounter a real protectionist policy in the pre-industrial period.

One case is related with the provisioning of Istanbul. In July 1810, the government demanded the annual supply of charcoal from the villages of Bahçecik

regulations concerning land tenure system in the provinces. Halil İnalçık, "Kanunnames," in *Encyclopedia of Islam*, ed. H. A. R. Gibb et al (Leiden: Brill, 1960-).

¹⁵⁰ Türkiye Diyanet Vakfı İslâm Ansiklopedisi, "Korucu," vol. 26 (1988-): p. 214.

¹⁵¹ HK, *Doc. No. 374*; HK, *Doc. No. 380*; HK, *Doc. No. 382* (1162/1748-49).

and Yeniköy (district of Kocaeli, northwestern Anatolia), as they were specialized in the production of charcoal. The local officials informed the government that there were no pine trees remaining in the surrounding mountains. The peasants of Iznik and Karamürsel districts could supply the demand, but because their burden had increased for some time, the pine trees in this region were also exhausted.¹⁵² It is not clear whether there was a total depletion of pine trees in the Kocaeli district, because in another document dating from about the end of 1809, we learn that the inhabitants of the same Bahçecik, Yeniköy, and Yuvacık villages were still working in the charcoal production in Yalova and other places for their own benefit, which the government considered to be an abandonment of obligations. Nevertheless, the government postponed felling trees from these forests for fifteen years until the growth of new pine trees.¹⁵³

Overall, the major issue for the government was the protection of *miri* (state/public) forests, which were reserved for certain institutions, like the Imperial Shipyard, the Arsenal, and the Mint. The provisioning of Istanbul with firewood and charcoal and other raw materials that were consumed by certain crafts and artisans, was another crucial concern. Outside the reserved forests, there were *cibal-i mubaha* (literally means ‘permitted mountains, but the term refers to the ‘unenclosed common forests’), village and town coppices (*baltalık*, or *odunluk*), *vakıf* (pious foundations) forests, and a few private woodlands. There were very few codified rules and regulations for these forest categories. The felling of trees and collection of non-timber forest products from these mountains were regulated through customary rules. The state did not intervene into the local affairs related to the *cibal-i mubaha* forests and village coppices, unless there was a dispute among claimants.¹⁵⁴

¹⁵² BOA, *C. IKT. 560* (26 C 1225/26 July 1810).

¹⁵³ *Ibid.*

¹⁵⁴ HK, *Doc. No. 382*.

1.7.1. Montane Forest as Unenclosed Land

In terms of area, the *cibal-i mubaha* was the most extensive category of forests. Essentially, these forests were the public property *de facto* owned by the state, which means that the state was the owner of such forests on behalf of the public interest. The word *mubah*, literally means ‘indifferent,’ ‘tolerated,’ and ‘permissible,’ is neither commanded nor forbidden by canonical law. In terms of land use, *mubah* means free land to be used by the public. It is actually an ‘unenclosed land.’¹⁵⁵ On the other hand, the concept ‘*mubah*’ legalized the enjoyment of everything that is not prohibited and provided that no damage is given and no appropriation takes place, for the benefit of community writ large.¹⁵⁶ On this occasion, *cibal-i mubaha* denotes the mountains belonging to the state, but left free to public use as pasture, woodland, and the like. All local inhabitants could have access to them, and no one could exclude the others from enjoying the benefits. These forests belonged to the public in joint ownership and could not be turned into private property. Moreover, the products of these forests could not be the subject of taxation. Implicit in this is the fact that the property rights of the state were also restricted with the public interest (*mesağ-ı şer’i*). The boundaries of *cibal-i mubaha* were not usually registered in the surveys. If a forest was not under the jurisdiction of any state authority, *vakıfs*, village bodies, or private persons, it was considered to be *cibal-i mubaha*. Sometimes it could even be within the domains of a certain *mezra’a*, i.e. a large farm with no permanent settlement.¹⁵⁷ Notwithstanding the

¹⁵⁵ Sir James W. Redhouse, *A Turkish and English Lexicon*, New ed. (Beirut: Librairie du Liban, 1996 [c. 1890]).

¹⁵⁶ James Schacht, “Ibâha,” in *Encyclopaedia of Islam CD-ROM Edition v. 1.0* (Leiden: Koninklijke Brill NV, 1999).

¹⁵⁷ BOA, *IAD. 3/369* (Er. Ca 1164/17-26 April 1751). *İstanbul Ahkâm Defterleri. İstanbul Tarım Tarihi 1*, pp. 240-41; Nurullah İşler and Yusuf Gök, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - III [Documents on Ottoman Forestry -*

particularities of the category *cibal-i mubaha*, individuals could occasionally manifest possessive claims over these forests.

The testimonies of local peasants in a document from the mid-eighteenth century informs that a certain Ali Çavuş Ağa, son of Mustafa Ağa, seized illegally the *cibal-i mubaha* forest within the *mezra'a* of Akviran village near Silivri (Thrace). Ali Çavuş Ağa claimed that he possessed a signed *temessük* (title of usufruct) taken from the *timar*holder of the *mezra'a*, the *sipahi* Mehmed. Since Mehmed did not have a right to transfer the forest directly to Ali Çavuş Ağa by his own will, he bypassed the rule by a common trick used in such kind of transfers. When the opposing parties, the local peasants and Ali Ağa, appealed to the *kadı* court, Ali Çavuş Ağa expressed that the aforesaid 'land' (not forest!) reverted to Mehmed from such and such person by escheat (*mahlul*) and then he took the *temessük* from Mehmed.¹⁵⁸ Two points, one overt and one hidden, in the testimony of Ali Çavuş were critical. First, the land in question seemed to be an escheated possession (*mahlul-i sırfâ*, or the transferred possession to the state, as the real owner of the property, in the absence of legal heirs). In this case, the *sahib-i arz* ('master of the land', the *sipahi*) had a right to lease the usufruct rights (*tefviz*). Second (the hidden point), Ali Çavuş did not claim a right of usufruct to the *cibal-i mubaha* forest, but to a certain 'land'. On the contrary, the peasants claimed that the previously mentioned land was *cibal-i mubaha* and they were felling trees 'from time immemorial' without any hindrance. The *naib* (deputy judge) of Silivri, then, appealed to the *Defter-i Hakani* (Imperial Registry) in Istanbul to check the real condition of the contested land. The registers revealed that the *cibal-i mubaha* in question was not previously given to anybody neither with a *resm-i tapu* (entry fine) nor with a *temessük*. Finally, the government instructed the deputy judge that

III], T. C. Çevre ve Orman Bakanlığı Eğitim ve Yayın Dairesi (Orman Bakanlığı Yayın No: 217) (Ankara: 2003), p. 19.

¹⁵⁸ BOA, IAD. 3/369. *İstanbul Ahkâm Defterleri. İstanbul Tarım Tarihi 1*, pp. 240-41; İşler and Gök, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - III*, p. 19.

the disputed land was a *cibal-i mubaha* and thus the *temessük* of Ali Çavuş was against the rules and regulations and violated the customary rights of the local peasants.¹⁵⁹

However, the practices concerning *cibal-i mubaha* were much more complex than the above case displayed. For example, these forests might have situated on *mevat* lands. It consists of uncultivated or rough lands, such as mountains, stony ground, and forest, which were useless for agriculture without clearance. Although originally no possessive rights could be claimed, any one could obtain a permit from the *sahib-i arz* to clear and cultivate such lands.¹⁶⁰ The rules pertaining *miri* lands then applied to them. However, if a peasant did not cultivate the cleared land for three successive years, the *sahib-i arz* was authorized to confiscate and grant it to another person. If this land was cleared from forests, i.e. in the *cibal-i mubaha*, there was no prerogative. If the clearance is affected without the necessary permit, the land is nevertheless granted on application, and on the payment of the *tapu* (entry fine) determined for the value of the land. As is clear, the main concern of the government was to maintain the sustainability of agricultural production. On the other hand, the conversion of arable land to meadow and pasture was strictly forbidden, as it meant to be a loss of revenue. For this reason, afforestation of a land might have been considered the same as well. According to the well-known legist Ebu's-suud Efendi, the conversion of arable land to meadow was to leave it fallow on the grounds that

[t]he rent (*muqata'a*) due from it is not equal to the tithe which would accrue from cultivation. The remainder of the crop that belongs to the peasant after the deduction of the tithe is the yield of what is produced by

¹⁵⁹ *İstanbul Ahkâm Defterleri. İstanbul Tarım Tarihi 1*, pp. 240-41.

¹⁶⁰ This is called in the Ottoman kanunnames and fetvas as “kendi çapası ve baltasıyla orman ve dağ açmak [“to clear with an axe or hoe thyself a field from the forest or mountain”]. See: “Maruzat-ı Ebu's-suud” in: Akgündüz, *Osmanlı Kanunnâmeleri*, vol. 4, p. 35-36.

labor. If a tithe is taken on what has been produced without the peasant's labor, then the remainder is not due to the peasant.¹⁶¹

Thus, grass on the meadowland was considered to be a 'crop' that was produced without the labor of the peasant.¹⁶² By the same token, if the naturally growth (*hüda-yı nabit*) trees were abstracted according to this reasoning, it became a reason for justifying the forest clearances. But, the situation was different with the orchards, vineyards, and fruit trees, which were yielding agricultural produce. For example, from the naturally-growing (*hüda-yı nabit*) trees (neither planted nor grafted fruit-bearing trees), and from those of standing trees since the 'time of the infidels,' located in the private estates (*hassa çiftlik*, or *kılıç yeri*) of the *sipahis* (*timarholder*, or the *sahib-i arz*), which were exploited under a sharecropping system, the *sipahi* could receive half of the produce, instead of the tithe. However, he had no right to sell such kind of trees. If he did, the selling was valid only in his period of office. The successive *sipahi* could cancel the sale.¹⁶³

The *vakıf* forests could also be leased to certain villages with common usufruct rights through a *resm-i tapu*. This was permissible according to the regulations. Such kind of a lease gave exclusive rights to the tenants at the expense of surrounding village inhabitants. However, the *timar*-, or *malikane*-holders could not lease certain forests that were reserved for nearby villages as coppices to another person or village.¹⁶⁴

¹⁶¹ Colin Imber, *Ebu's-Suud: The Islamic Legal Tradition* (Edinburgh: Edinburgh University Press, 1997), p. 127.

¹⁶² *Ibid.*, p. 128.

¹⁶³ Barkan, "XV ve XVI 'ıncı Asırlarda Osmanlı İmparatorluğu'nda Toprak İşçiliğinin Organizasyonu Şekilleri," p. 623.

¹⁶⁴ Kutluk, ed., *Türkiye Ormancılığı ile İlgili Tarihî Vesikalar*, p. 24 and 44.

1.7.2. Hunting and the Crown Forests

Manwood's *Treatise of Forest Laws* defined the concept 'forest' as

[a] certain territory of woody grounds and fruitful pastures, privileged for wild beasts and fowls of forest, chase, and warren to rest, and abide there in the safe protection of the king, for his delight and pleasure; which territory of ground so privileged is mered and bounded with unremovable marks, meres and boundaries, either known by matter of record or by prescription; and also replenished with wild beasts of venery or chase, and with great coverts of vert, for the succour of the said beasts there to abide: for the preservation and continuance of which said place, together with the vert and venison there are particular officers, laws, and privileges belonging to the same, requisite for that purpose, and proper only to a forest and to no other place.¹⁶⁵

Though such a detailed legal definition of the crown forests (*koru-yı hümayun*) in the Ottoman Empire was lacking, they were those tracts of woodlands belonging directly to the Ottoman palace. Besides their reserve for hunting and recreation purposes, the Ottoman crown forests were agricultural and husbandry complexes as well, where the royal family engaged with livestock raising and cultivation. The Sultan used his own slaves (*kul*) to take care of the businesses within crown forests. The protection was provided by a division of the janissary army, who were exempted from participating in military campaigns.¹⁶⁶ Under the usual provisions, felling trees from crown forests without permits was prohibited. In addition, the conversion of crown forests to arable land was deemed to be an offence against the crown rights. However, during the turmoil of the early sixteenth

¹⁶⁵ J. Manwood, *Treatise of the Forest Laws*, 4th ed. (1717). Quoted in: Wilhelm Schlich, "Forests and Forestry," in *The Encyclopaedia Britannica* (London and New York: Encyclopaedia Britannica, 1911), p. 645. John Manwood (d.1610) was barrister and Justice of the New Forest. His *A Breve Collection of the Lawes of the Forest* brought out for private circulation in 1592. It first appeared in published form, revised and enlarged, in 1598 and was followed by several subsequent editions.

¹⁶⁶ "Tımar ve Taşra Teşkilâtı Kanunname-i Hümayunu (Ali Çavuş Kanunnamesi)," in: Akgündüz, *Osmanlı Kanunnâmeleri*, vol. 4, 460-527, p. 480.

century, we see that many former crown forests were cleared by local people, even by the janissaries and *timar*holders themselves, and converted to either pasture or agricultural estates. As in the case of the purlieu—meaning “a piece of land on the edge of a forest,” or “a land exempt from the forest”—in England, the Ottoman dynasty also continued to exert its prerogative rights to the deforested lands as if they were still crown property.¹⁶⁷

An incident from the last years of the reign of Mehmed II (r. 1451-1481) displays the economic functions of crown forests and the difficulties of management. It is stated that the shepherds of the crown forests, where the main economic activity was animal husbandry, or specifically sheep herding, in Bursa İkizce Hassı (crown estate) used to occupy forest land more than four *müds* (a land measurement capable of producing about 445 to 513 kilograms of grain) and engaged mostly with agriculture and quit herding by hiring some other shepherds to do it on their behalf. But it seems that had the shepherds paid the required tithes, the incident would not have been lodged with the palace. The sultan ordered that shepherds could at most get four Bursa *müds* of cultivable land, but they would be exempted from payment of tithe if they produced only for their subsistence. If the squatters owned more than this amount, the Sultan ordered, they were to pay the *bedel-i mukata‘a* (rent) in place of the tithe for that excess part of the estate. Those who owned land but did not herd sheep were to pay the *bedel-i mukata‘a* for all the land they possessed. From then onward, it became forbidden to clear land from the crown forest. If it were necessitated to distribute land to *kuls* (slaves), the *emins* (superintendents) of this *hass* (crown estate) would distribute the uncultivated land, and prevent any more incursions to the forests.¹⁶⁸

¹⁶⁷ Ibid., vol. 6. For a masterful work on the struggle over the English royal forests in the eighteenth century, see: E. P. Thompson, *Whigs and Hunters: The Origin of the Black Act* (London: Allen Lane, 1975).

¹⁶⁸ “Bursa İkizce Hassı Kanunnamesi,” in: Akgündüz, *Osmanlı Kanunnâmeleri*, vol. I, pp. 609-14.

There were also other squatters who were not shepherds, but who also cleared land from the crown forest (*hassa koru*). The villagers around the *hassa koru* used to log trees and hunt animals. They did not consider themselves bound by the orders of the superintendents. But it seems that the secluding places for the herds during the winter were destroyed due to the loggings and the hunters caused damage to the herds. The palace ordered that the guards (*korucular*) were to pay great attention to the protection of trees and game. But they were to respect the villagers' traditional utilization of the forest resources. Though there is no further explanation on the nature of this traditional use, it is probable that peasants living near this *hassa koru* were allowed to collect decayed trees and branches. However, if the main economic activity in a crown estate was agriculture, then the palace could entirely prohibit the encroachment to the forests within the estate. For example, the peasants were not allowed to graze their herds in the forest or cut the reeds that were not earmarked. The guards were authorized to collect fines in default of a violation of the proscriptions.¹⁶⁹

We know from documents that local people encroached upon the crown forests (*koru-yı hümayun*) in the Izmid-Sakarya region from time to time as well. The palace sent consecutive statements to the judge of the region telling that it was strictly forbidden to fell trees from crown forests. However, in a reply, the judge of Izmid informed the government that he could not prevent the local inhabitants from felling trees, because they claimed that they were cutting timber on behalf of the *miri* (state). The government once again told the judge that timber for the use of shipyard was to be cut from the reserved forests, not from the crown ones. But the crucial point in this incident was that the government acknowledged the customary practices of local people. According to the order, if the inhabitants were cutting timber from these forests from time immemorial, then the judge was to reserve at

¹⁶⁹ “Edirne Haslar Yasaknamesi (1467-1470)” in: *Ibid.*, vol. I, pp. 485-87.

least one part of the crown forest for the use of the public, where the timber was useless for the shipyard.¹⁷⁰

Until the late seventeenth century, the major problem of crown forests was that their boundaries were not well delimited. This caused many disputes between the government and local inhabitants. In a document from the late sixteenth century, we observe that the Sultan asked for the *kadis* of Üsküdar, Kandıra (northwestern Anatolia), Osmancık (central Anatolia), Budak (central Anatolia), and Gönen (western Anatolia) to register the boundaries of crown forests in their regions with the help of local experts (*ehl-i vukuf*) to prevent squatters' inroads. The *kadis* were commissioned to fix the necessary border stones in their right places in order to prevent future disputes with the local people.¹⁷¹ To prevent such conflicts, the government issued a decree in late seventeenth century, which stated that the boundaries of crown forests were to be surveyed and demarcated every three years in a special register.¹⁷²

In another case, peasants, living at the other slope of the Istranca mountain (Thrace) took inroads to the crown forest lying on the road connecting Vize and Midye. They cut the upper branches of trees as 'browse wood' for their sheep. Upon this incident, the sultan ordered the judge of Vize to permit solely the trespassing of the sheep flocks of *celebs* (drovers) to the previously mentioned forest and added that those who would not consider the Sultanic order would be condemned to forced labor at the galleys.¹⁷³

¹⁷⁰ BOA, MD. 3/285 (29 Za 966/2 September 1559). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 2-3.

¹⁷¹ BOA, MD. 47/73 (990/1582). İşler and Gök, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - III*, pp. 4-5.

¹⁷² HK, Doc. No. 66 (23 C 1101/3 April 1690); HK, Doc. No. 76 (M 1148/May-June 1735).

¹⁷³ BOA, MD. 5/691 (29 C 973/21 January 1566). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 24-25.

Local hunting in crown forests was considered as an offence against the rights of the dynasty. Other unauthorized acts included pasturing animals, enclosing winter quarters, and felling trees in any part of such forests. In early 1566, the local militia commander (*sekbanbaşı*) informed the palace that local people built winter quarters for their animals and were pasturing their sheep and cattle within the crown hunting forests (*hassa şikar koruları*), located in Balkans and Thrace (Hasköy, Yanbolı, Kırkkilise, and Ferecik). They were also cutting trees and hunting with rifles and hounds. The palace sent Sinan, one of the courtiers, to assist the judges in the investigation of the case. Moreover, the judges were ordered that nobody could fell trees, hunt with hounds within the crown forests, and added that nobody should use firearms, pasture animals, and build enclosed winter quarters.¹⁷⁴

Above cases displays that the Palace did not have an absolute control over crown forests. They also show that local customary rights could not be repudiated due to the discrepancies of the Sublime Porte to impose its own interests on the one hand and to respect local customs on the other.

1.8 Market Relations in Forest Products

In the pre-industrial period, agricultural land was the principal source of wealth and the backbone of the Ottoman military power. If we define the basic Ottoman economic policy as the concern for maximizing the tax revenues from the rural economy (*à la İnalcık*), we may then call the pre-modern Ottoman state a fiscal state.¹⁷⁵ Similarly, the forest-related economic policies of this period can be

¹⁷⁴ BOA, MD. 5/691. Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormanlığı ile İlgili Belgeler - I*, pp. 22-23.

¹⁷⁵ For a discussion of Ottoman fiscalism in this period, see: Mehmet Genç, "Osmanlı İktisadi Dünya Görüşünün İlkeleri," in *Osmanlı İmparatorluğunda Devlet ve Ekonomi* (İstanbul: Ötüken, 2000). For a fine-tuning of his arguments, see: Pamuk, "Institutional Change."

called, with some reservations, ‘fiscal forestry.’ The government imposed taxes on forest products as far as they were sold in the market, since it necessitated minimum supervision. If local inhabitants used these products for household consumption, they were exempted from taxation.

Basically, this principle of ‘fiscalism’ was related with the acts and efforts to increase the revenues of the treasury to the highest level, which included decreasing expenses as much as possible. Shortly, this means that the government tried to increase the revenues. If it did not succeed, then it tried to cut expenses,¹⁷⁶ and hindered the development of the revenue sources of some powerful groups in the society. Most importantly, the state control of land tenure and the regulation of trade and market relations prevented the formation of landed gentry at least until the eighteenth century. Moreover, as Genç argues, by strictly controlling the fiscal and monetary relations, the state consciously did not want the rise of a merchant class at the expense of other classes,¹⁷⁷ though there were a few exceptional rich and strong merchant families. On the other hand, the state encouraged the continuity of agricultural production by supporting the smallholding peasantry in consideration of the payment of rents and taxes.

There is almost no information on the Ottoman practices of taxation of forest products for the fourteenth and early fifteenth centuries. However, there are a few clues on the basis of which we can make certain speculations. For example, a narrative mentioned both in the *Aşıkpaşazade Tarihi* and the *Kitab-ı Cihannüma* by

¹⁷⁶ Genç, “Osmanlı İktisadi Dünya Görüşünün İlkeleri,” p. 51.

¹⁷⁷ Genç claims that the monetary and market relations were limited in this period. The government did not desire the merchants and traders to maximize their revenues. This feature was directly related with the underdevelopment of capital accumulation in the Ottoman empire. In short, being that the limit of profits (between 5-15 percent) for traders and merchants was lower than rate of interest (between 15-25 percent), it was impossible for traders and merchants to accumulate capital. On the other hand, the askerî class was capable of taking money with these high rates of interest and thus had a monopoly-like domination over monetary relations. Genç claims that all these features combined with the state’s rationale, which considered the economic relations only based on tax revenues. *Ibid.*, p. 52.

Katip Çelebi states that for each *yük* (load) of any item that was sold in the market, two *akçes* had to be paid as a due (*baç*) to the Ottoman sultan. It may be inferred from the information that the Sultan took two *akçes* from a *yük* of firewood that was sold in the market in the early fourteenth century. This was said to be a customary law of preceding rulers.¹⁷⁸

In the early sixteenth century, when the Ottomans defeated the Safavids, they made a general inquiry about the customary agricultural practices and taxation in the former Akkoyunlu lands.¹⁷⁹ Such kind of preliminary inquiries, which registered potentially taxable sources of wealth, was held whenever the Ottomans established themselves in newly conquered lands. They were widely used as a supplementary data to the more detailed population and land registers (*tahrir defterleri*).¹⁸⁰ The Ottoman government often used the information of these inquiries as a basis for the subsequent revisions in rules and regulations. In many cases, they took over local practices.¹⁸¹ Here, the aim is not to delve into a detailed discussion on these inquiries and land registers, but these are valuable sources for assessing the Ottoman taxation methods of natural resources.¹⁸² From these

¹⁷⁸ Aşıkpaşazade, *Osmanoğulları'nın Tarihi*, ed. Kemal Yavuz and M. A. Yekta Saraç (İstanbul: K Kitaplığı, 2003). *Katip Çelebi'den Seçmeler*, ed. Orhan Şaik Gökyay (İstanbul: Milli Eğitim Bakanlığı, 1968).

¹⁷⁹ The results of this inquiry has been published by Ömer Lütfi Barkan. Barkan, *XV-XVI ıncı Asırlarda Osmanlı İmparatorluğunda Ziraî Ekonominin Hukukî ve Malî Esasları*. Ömer Lütfi Barkan, "Osmanlı Devrinde Akkoyunlu Hükümdarı Uzun Hasan Bey'e Ait Kanunlar," in *Türkiye'de Toprak Meselesi* (İstanbul: Gözlem Yayınları, 1980 [c1941]).

¹⁸⁰ For a brief description of the process of compilation of these registers in the fifteenth and sixteenth centuries, see: İnalçık, "Ottoman Methods of Conquest," pp. 110-111.

¹⁸¹ For a general discussion on this issue, see: Ibid.

¹⁸² In Barkan's article, there are examples of rules from the early sixteenth century (1516 and 1518 *tahrir* registers) from the southeastern Anatolian cities, such as Diyarbekr, Mardin, Ergani, and Urfa. Barkan, "Uzun Hasan Bey'e Ait Kanunlar," pp. 545-49.

sources, it is possible to gain information on the amount of local taxes and dues taken from the marketable forest products. All of these local amounts were recorded by the official registrar in detail and then submitted to the central government for a final decision. The fiscal or local taxation rates, applied under the rule of Uzun Hasan of the Akkoyunlu state, which in fact were based on regulations of even earlier times, were kept intact in many instances. For example, the *Defter-i Yasaha-i Vilayet-i Diyarbekr*¹⁸³ specified a rate of one *karaca akçe* for every Amid *batman* of tar (*katran*), pitch (*zift*), black resin (*kara sakız*), white resin (*ak sakız*), and (*çıra yağı*) (three *batman* of each was equal to one Ottoman *akçe*). The local inhabitants were to sell forest products in the nearest market that was assigned to certain villages or towns. The government considered the peasants who traveled to some other unassigned market to sell forest products as a merchant engaging with trade in search of profit.¹⁸⁴

The development of international trade outside the state domain promoted a series of new arrangements in regional resource use and exploitation. The government took pains to regulate the market whenever a problem emerged in the flow of raw materials to Istanbul. The regulation of valonia oak trade is a good example to illustrate this argument. In the fourteenth century, İnalçık says, certain ports at the Aegean Sea became important outlets for the products of the Anatolian hinterland; these products included wheat, cotton and forest products supplied by nomads. They were exported to Europe by the Anatolian principalities.¹⁸⁵ Among these forest products, most marketable ones were valonia and gallnut. Trade in

¹⁸³ Ibid., pp. 549-552.

¹⁸⁴ Faroqhi, *Towns and Townsmen*, p. 57.

¹⁸⁵ İnalçık, "Yürüks," p. 52. Halil İnalçık, "The Rise of the Turcoman Maritime Principalities in Anatolia: Byzantium and the Crusades," *Byzantinische Forschungen* 11 (1985): p. 191.

valonia and gallnut, which, in fact, goes back to the Roman period,¹⁸⁶ continued in the Ottoman era. Besides the Izmir-Aydın region, the Kazdağı (Mount Ida, northwestern Anatolia) region became another important center of production under the Ottoman rule. The valonia, like gallnut, was used mainly in tanning and dyeing and was rarely consumed as fodder, fuel, and fertilizer.¹⁸⁷ There are numerous documents in the archives from the sixteenth to the early nineteenth centuries, which indicate the Ottoman interest in these commodities.

Two documents from December 1573 and March 1574 inform us that the tanners in Istanbul became distressed because of a shortage of valonia. The valonia produced in the districts of Çeşme, Tuzla, Seferhisar, and Ayazmend (all Aegean towns), that used to be sold to tanners until that time, had not arrived yet. The government ordained the judges of these regions to prevent the selling of valonia to other people, especially to foreign merchants, and to send valonia to Istanbul after keeping necessary amounts for local use.¹⁸⁸ Similar documents also exist for the years 1801, 1804, 1806, and 1813. However, there were new and critical factors in the foreground. Firstly, valonia had become an export item, sold to France, which the government intensely tried to prevent.¹⁸⁹ Secondly, it seems that the local powerholders (*ayan* and *mütesellims*) intervened in the valonia trade on their own by exerting pressure on over local producers to sell their commodities for cheaper prices. The restriction of trade in forest products continued well into the nineteenth

¹⁸⁶ Salâhattin İnal, “Türkiye’de Tarih Boyunca Palamut Meşesi ve Sağladığı Faydalar,” in *Türk Ormancılığı Yüzüncü Tedris Yılına Girerken, 1857-1957* (Ankara: Türkiye Ormancılar Cemiyeti, 1957).

¹⁸⁷ C. V., *The Art of Tanning and Currying Leather: With an Account of All the Different Processes Made Use of in Europe and Asia, for Dying Leather Red and Yellow* (London: 1780. The Making of the Modern Economy. Thomson Gale 2006).

¹⁸⁸ HK, *Doc. No. 376* (6 Ş 981/1 December 1573); HK, *Doc. No. 391* (23 Z 1215/7 May 1801).

¹⁸⁹ HK, *Doc. No. 393* (Er. S 1219/31 May-8 June 1804).

century. Nevertheless, after the initiation of new forest policies they began to soften and finally disappeared.

1.9. Conclusion

In the pre-industrial period, the ecological diversity of the Ottoman Empire had an important role in the land and natural resource tenure, which determined the ways in which these resources commanded and utilized. The distribution and composition, and extent of forest change in the pre-industrial period are quite unknown. But the relative backwardness of agriculture, population growth, massive immigrations, wars and political violence, financial and administrative arrangements affected the forest utilization and cover. Though clearing forests was an important part of agriculture, there are no discernible traces of extensive forest clearances in the pre-industrial period due to the lack of documentary sources. However, it is clear that forest clearings for cultivation were beneficial as far as they increased the tax revenues of the state.

Pressure on natural resources indicates that the forest utilization was an integral part of state administration. The tremendous need for fuel in mining industries and timber in shipbuilding was the decisive factor of the interest of the state in forests. The Ottoman state remained self-sufficient for a long time due to the comparative advantage in having local access to all the raw materials and labor for shipbuilding. However, due to the technological handicaps, the central government encountered great difficulties in extracting resources from forests, even unable to exploit marginal forests. The logistics of acquisition, transportation, and monitoring forced the government to invent new ways of organization and management throughout the pre-industrial period. But they also gave rise to resistance of local people, government agents, and merchants. From the sixteenth to

the eighteenth centuries, the state was concerned mostly with the wood supply of urban centers, rights of fuel wood and pasturage of peasants and townspeople, and wood and timber allotments of the military institutions. The development of international trade outside the state domain promoted a series of new arrangements in regional resource use and exploitation. On this ground, the central administration took pains to regulate the market exchanges in forest products, but it necessitated more effective institutions, which were lacking in the pre-industrial period.



Map of the Ottoman Empire, 1683-c. 1800. Source: İnalçık and Quataert, *An Economic and Social History of the Ottoman Empire*.

CHAPTER 2

FREE TRADE LIBERALISM AND SCIENTIFIC FORESTRY

2.1. Introduction

In the pre-industrial period, the traditional economic policy based on fiscalism and provisionism had curtailed exports and facilitated and encouraged imports. The Ottomans did not accommodate protectionist economic policies, but instead applied restrictions and prohibitions on the trade of certain commodities. As a state policy, the export of timber, firewood, and charcoal was controlled by the Ottoman government. Timber was a strategic commodity for the military. On the other hand, the trade of firewood and charcoal was restricted and banned for the sustenance of rural and urban livelihoods. The restrictions on agricultural and forest products in general delayed the development of market relations in timber, firewood, and charcoal. Such restrictive-prohibitive government policies were also supported by monopoly-holders in the provinces when production and consumption trends suited their profit-making aims. When the old capitulations granted to European powers were renewed at the beginning of the nineteenth century, there was no noteworthy change regarding the export of forest products. Even the articles of the Treaty of 1838 were suited to the fiscalist and provisionist concerns of the state, which conformed to the former Ottoman import-oriented policies. The actual shift in the Ottoman provisionist and restrictive-prohibitive policies emerged in the 1860s, though the policies afterward reminded “protective reaction” against the

expansion of market relations.¹⁹⁰ From that time onward, the oscillations between protectionist-interventionist and liberalist-free tradist economic policies began to have direct influence on the management of forest resources.

Meanwhile, the views about the abundance of Ottoman natural resources began to be declared rather frequently after the government's decision to open up its forests and mines to foreign competition. This determination was a strong sign of Ottoman inclination to free trade policies for marketing forest products. Coincidentally, the economic breakdown after the Crimean War forced the government to find new sources of revenue. Forest resources appeared to be an important one. Even during the 1870s, despite the failure of profit outlook of the government and foreign capitalists, the thrust in the capacity of Ottoman natural resources on the way to producing wealth continued. However, the liberalization of trade and the Ottoman inclination toward the marketization of forest products were not sufficient to meet neither domestic nor foreign demand. As a consequence, the Ottoman state became a net importer of timber. The reasons will be elaborated in Chapter 5, but for now it is suffice to say that timber extraction was a costly business for the government due to the transportation and labor costs.

2.2. Ottoman Trade Policies and Forest Products

Hinting on Smith's *Wealth of Nations*, many of the nineteenth century authors criticized the traditional Ottoman trade policies. Smith criticized the mercantilists, who presumed that the main goal of state policy was to be a positive balance of trade (the relation between imports and exports). For mercantilists what makes a country rich is to increase exports and decrease imports. Thus, governments for a long time adopted policies encouraging exports and preventing imports to the

¹⁹⁰ Polanyi, *Great Transformation*, passim.

benefit of merchants. In contrast, Smith claims that a trade surplus for one nation would naturally mean an equal deficit for others. Stressing too much emphasis on balance of trade would necessarily introduce interstate competition. Smith further indicates that governments should not particularly encourage exports or prevent imports and should leave individual producers to themselves to be able to do their best to maximize their production. Thus, under normal conditions, the total national production would increase (*laissez faire, laissez passer*). If no attempts were made to organize production on a national level the self-interested individuals, for Smith, would unconsciously amount to the advantage of one and all, as if it was directed by an 'invisible hand'. However, the free tradists of the nineteenth century did not want to see the real purpose of Smith's 'invisible hand' metaphor, which intended to explain why the merchants would continue to buy British products even if tariffs were removed.¹⁹¹ Advocated by British politicians and writers, the discussions on trade policies were mostly centered on tariff rates, restrictions and prohibitions, and free trade by the end of the eighteenth century. The Ottoman attitude to free trade and its wider receptions emerged to be an important component of these discussions.

The Ottoman government struggled against free trade and the smuggling of forest products until the first half of the nineteenth century. These attempts were most clearly visible during wartime. One can find several documents in the archives that mention Ottoman efforts to control exports to Europe and elsewhere by the local and foreign merchants. Among these documents, one is worth mentioning, because it aptly summarizes the general Ottoman policy.

Following the signature of the Treaty of Bucharest on 28 May 1812, which terminated the Russo-Ottoman War of 1806-1812, Russia returned Wallachia and Moldavia to the Ottoman state, but annexed Bessarabia. The Pruth River became

¹⁹¹ John Kay, *The Truth About Markets. Why Some Nations Are Rich but Most Remain Poor* (London and New York: Penguin, 2004), p. 184.

the border between the two countries. About one year later, the Sublime Porte issued an edict to the voyvode of Moldavia that urged him to stop Russian timber merchants' activities in the regions surrounding the Danube. The Sultan said:

The said timber is among the war supplies and in no time, there has been any precedent of an authorization given to any foreigner for selling and transporting wood and timber from my Protected Domains. Nevertheless, it became evident that timber is being sold to foreign countries from Braila, Tulchea and Moldavia, and other districts on the banks of the Danube due to the covetousness and corruption of some profiteers.¹⁹²

Consequently, the Ottoman sultan dictated the voyvode that henceforth no timber would be sold to any foreign merchant in Moldavia and added that Muslim and non-Muslim timber merchants of the Ottoman Empire were to transport wood and timber directly to Istanbul. The voyvode was to be careful about assigning each merchant to 'trusted' guarantors.¹⁹³ It is noteworthy that the same warning was repeated three times in the body of the document as if the voyvode would fail to carry out the orders.

The tariff treaties made with European states also proved that the Ottoman state was reluctant about the export of timber. The trade of non-timber products was rather unfettered. From the sixteenth century onward, the Ottoman government had been levying three percent *ad valorem* import and export duty on goods and an anchorage on ships. These were the only taxes imposed on the imports to the Ottoman Empire until about the end of the eighteenth century. Though the rates were uniform, the Ottoman government favored imports over exports and sought in every occasion to prevent sending local goods abroad.¹⁹⁴ However, the gradual

¹⁹² BOA, C. *IKT.* 17 (Et. Ş 1228/9-18 August 1813). Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 138-140.

¹⁹³ BOA, C. *IKT.* 17. Batmaz, Koç, and Çetinkaya, eds., *Osmanlı Ormancılığı ile İlgili Belgeler - I*, pp. 138-140.

¹⁹⁴ Charles Issawi, *Economic History of Turkey, 1800-1914* (Chicago and London: University of Chicago Press, 1980), 74. Issawi gives a couple of reasons to explain the cause of this policy. They are the social and political structure of the

depreciation of the currency and the overall rise in prices during the first quarter of the nineteenth century lessened the revenues from the customs duties.¹⁹⁵ Moreover, though the legal duty was fixed at three percent, foreign merchants complained heavily about the informal exactions of government agents and intermediaries, especially in Rumelia and in the Principalities.¹⁹⁶ Some have also argued that this ‘wretched’ policy of the Ottoman government, at the same time, damaged the agricultural production by rendering the ‘natural’ demand ineffective. This, in turn, benefited the ‘extorters of the revenue’, such as fiscal, military, or administrative

Ottoman Empire, wherein the interests of the army and bureaucracy predominated over other groups; the critical concern about the provisioning of Istanbul and other cities; the discrepancy between the prices of European and Ottoman goods that pointed the Ottoman efforts toward an export surplus in Europe trade. Essentially, this latter concern was the main cause of the Ottoman stress on customs duties on exports. One of the proponents of free-trade criticized the Ottoman commercial policy on the grounds that the Empire was unaware of the modern economic practices and ‘maxims’: “The Ottomans, in their commercial regulations, adopted the extreme reverse of the Spanish fallacies for enriching and aggrandizing a nation, If Spain determined to admit nothing produced by any other country than her own colonies, Turkey sized upon the fanciful idea of becoming rich, prosperous, and mighty, by letting nothing go out of, and to let everything come freely into, her dominions: a very acquisitive legislation, truly! Pity for the Turks, its advantageous realization was, and shall ever be, impossible. *We must give, if we mean honestly to receive, and buy as well as sell*, is a commercial maxim that will ever hold true. It requires little more than a full knowledge of how this maxim is to be judiciously put into practice, to legislate for trade, or to negotiate the best possible treaty of international commerce... though the commodities of other countries thus found easy ingress to, and generally ready markets in, the Turkish empire, yet the commercial policy of the Porte, especially in regard to the produce of her soil, was narrow, impolitic, and unjust.” John MacGregor, *Commercial Statistics: A Digest of the Productive Resources, Commercial Legislation, Custom Tariffs, Navigation, Port, and Quarantine Laws, and Charges, Shipping, Import and Exports, the Monies, Weights, and Measures of All Nations; Including All British Commercial Treaties with Foreign States*, 4 vols., vol. 2 (London: 1847), pp. 13-14.

¹⁹⁵ Issawi, *Economic History of Turkey*, p. 74 and 79. For a good analysis of the debasement and price increases in the first half of the nineteenth century, especially see: Şevket Pamuk, “The Great Ottoman Debasement, 1808-1844: A Political Economy Framework,” in *Histories of the Modern Middle East: New Directions*, eds. Hakan Erdem, Israel Gershoni, and Ursula Woköck (Boulder, Colo.: Lynne Rienner, 2002).

¹⁹⁶ MacGregor, *Commercial Statistics*, p. 14.

agents of the central government. In effect, the author was talking about the misdeeds of stockbrokers or purchasing agents (*mubaya'acı*) in the provinces, who were given certain monopolistic rights in the commodities that were allowed to be exported and on the goods that were bought to be transported to the capital or to other cities, including timber, firewood, and charcoal.¹⁹⁷ These people bought the goods offered by sellers in a specific region and sold these goods to purchasers or, if they were employed by the government, transferred them to the capital with a fixed price. Unless their profit margins decreased sharply, they preferred to support the governmental policies of restriction and prohibition. But these policies generally worked at the expense of primary producers.¹⁹⁸

The regulation of trade with European states was mainly based on the provisions of the seventeenth century trade agreements. During the reign of Mehmed IV (r. 1648-1687), the terms of these agreements were embodied in two imperial decrees, or rather tariff treaties, dated 1673 and 1675. The former was issued to regulate the trade with France and the latter with England. Then the other countries also confirmed the stipulations of these decrees. The French and English merchants were granted the privilege to trade and buy, or load and transport, every commodity, except for arms, gunpowder, and other prohibited commodities, after paying the three percent duty for exported and imported goods and without confronting any hindrance or obstacles by the local Ottoman officials.¹⁹⁹ But the provisions of these treaties gave the Ottoman government an implicit right to

¹⁹⁷ Later, we will see that these rights and privileges were very essential for accumulating capital for some governors in the provinces.

¹⁹⁸ MacGregor, *Commercial Statistics*, p. 14.

¹⁹⁹ Bernard Camille Collas, *1864'te Türkiye [La Turquie en 1864]*, trans. Teoman Tunçdoğan (İstanbul: Bileşim, 2005 [1864]), pp. 314-39; MacGregor, *Commercial Statistics*, pp. 19-20. For a brief evaluation of the capitulations granted to European powers, see: Collas, *1864'te Türkiye*, pp. 113-129. Collas thinks that the special articles in these capitulations prevented the Ottoman reforms to be realized. For him, these articles were to be revised in accordance with the requirements of the age.

restrict the export of forest products, especially timber and firewood, since they could be easily classified as war supplies. For the non-timber products, such as valonia, nutgall, resin, tar and pitch, there seemed to be no major problem. Although there were no specific articles in the trade treaties until 1740, it seems that the Ottoman government allowed the use of timber, pitch, and tar for repairing and caulking of foreign merchant ships.²⁰⁰ However, as stated in Chapter 1, the government also prohibited the export of these products during the periods of input crisis of local industries.

The bans on exports, however, could not be applied uniformly throughout the Empire. For example, the export trade of Macedonia, where most of the commodities were exported by Thessaloniki, was not so much restricted as Rumelia. Here, many commodities were exported in large quantities to various countries by Greek merchants. The government, also, could not control the import and export trade in Albania because of the geographical and political conditions, where the trade was chiefly held with Trieste, Venice, and Corfu, by the port of Scutari. Even in Izmir, the chief outlet for the produce of its hinterland, the duties on exports were lower than the legal rate of three percent, though the internal duties were higher, not being in accord with prescribed rates.²⁰¹ On the other hand, the trade of Danubian Principalities was strictly supervised by the Ottoman government, since they were among the major suppliers of the capital and other big cities, though a great quantity of firewood was sent into Austria, Hungary, and

²⁰⁰ On this point, an article was included in the imperial decree of 27 May 1740. This decree, the first after the 1673 capitulations, rearranged the regulation of trade and protection of French merchants' ships within the Empire. Collas, *1864'te Türkiye*, p. 334.

²⁰¹ The internal duty (*müruriye resmi*) on goods carried by land was eight percent. Charles Issawi, ed., *The Economic History of the Middle East, 1800-1914: A Book of Readings* (Chicago and London: University of Chicago Press, 1966), p. 38.

Walachia from Serbia.²⁰² It was also difficult to prevent the smuggling of forest products, especially the ones that were arranged afloat.

Though the capitulations granted to England and France was renewed at the beginning of the nineteenth century, there was no noteworthy change regarding the exportation of forest products. The articles in the previous treaties were replicated, thus further empowering the Ottoman government to prohibit the export of timber, firewood, and charcoal depending on the circumstances. Though the government sought to increase the customs duties since the beginning of the nineteenth century, the European countries were reluctant to accept. The backbone of their resistance was the continuing monopolies, restrictions, and prohibitions of certain trade items.²⁰³

By the early 1830s, during the political turmoil caused by the Egyptian problem, the Ottoman government found itself in the middle of a bargain enforced by British government on the tariff rates. Meanwhile, the government was seeking to increase the import and export duties, because of the rise in price levels, and to protect the Ottoman manufacture against the competition of foreign products.²⁰⁴ The negotiations were concluded with the Treaty of 1838, the Baltalimanı Treaty (Anglo-Turkish Commercial Convention). According to this treaty, the Ottoman

²⁰² MacGregor, *Commercial Statistics*, p. 51.

²⁰³ Issawi, *Economic History of Turkey*, p. 74.

²⁰⁴ Mehmet Genç, “19. Yüzyılda Osmanlı İktisadi Görüşünün Klasik Prensiplerindeki Değişmeler,” in *Osmanlı İmparatorluğunda Devlet ve Ekonomi* (İstanbul: Ötüken, 2000), p. 93; Issawi, ed., *The Economic History of the Middle East*, p. 38. Already in 1829 and 1833, with the Treaties of Adrianople and Hünkâr İskelesi respectively, the Ottoman administration had granted certain commercial advantages to Russia and these advantages were envied by other European states. Issawi, *Economic History of Turkey*, p. 74. The import and export duties in the tariff agreed to with Russia were three percent ad valorem. However, Russia did not enter into any stipulation for the abolition of the internal duties, in lieu of which, England and France have agreed to pay nine percent on exports in 1838. MacGregor, *Commercial Statistics*, p. 34.

administration accepted to annul monopolies, restrictions, and prohibitions.²⁰⁵ On the other hand, the British consented to increase the duties on imports and exports, which were fixed at five percent on imports, 12 percent on exports, and three percent on transit trade.²⁰⁶ After a short while, the other European powers followed Great Britain and agreed with the tariff rates. The articles of this treaty were suited to the fiscalist and provisionist concerns of the state. While the rates for both import and export duties increased, they did signal a continuation of former Ottoman import-oriented trade policies. However, they situated the Ottoman economy at a disadvantaged position. After the Treaty, the Ottoman handicrafts could not compete with the foreign manufacture and thus began to decline. However, the reversal of restrictions on the export of raw materials and foodstuffs benefited the primary producers and stimulated the growth of agricultural output.²⁰⁷

In this milieu of commercial expansion, the forest products constituted a small portion of exported raw materials. The Consular reports provide some

²⁰⁵ The 2nd article of this Treaty states: “The subject of her Britannic majesty, or their agents, shall be permitted to purchase at all places in the Ottoman dominions (whether for the purpose of internal trade or exportation) all articles, without any exception whatsoever, the produce, growth, or manufacture of the said Dominions; and the Sublime Porte formally engages to abolish all monopolies of agricultural produce, or of any other articles whatsoever, as well as all *Permits* from the local Governors either for the purchase of any article, or for its removal from one place to another when purchased; and any attempt to compel the subjects of her Britannic Majesty to receive such *Permits* from the local Governors, shall be considered as an infraction of Treaties, and the Sublime Porte shall immediately punish with severity any Vizirs and other officers who shall have been guilty of such misconduct, and render full justice to British subjects for all injuries or losses which they may duly prove themselves to have suffered.” Issawi, ed., *The Economic History of the Middle East*, p. 39. Concerning this article, the British government also requested an explanatory note, which would assure that the right of English merchants to sell within the Ottoman Empire, or to export, the merchandize which they may purchase, may not be liable to misconceptions. This note was delivered to Lord Ponsonby by Nuri Efendi on 27 August 1838 (7 C 1254). MacGregor, *Commercial Statistics*, p. 34.

²⁰⁶ Issawi, ed., *Economic History of the Middle East*, p. 38.

²⁰⁷ Issawi, *Economic History of Turkey*, p. 75.

information on the trade of forest products between 1841 and 1842. For example, the official trade accounts indicate that ships loaded for Great Britain carried few cargoes regarding timber and non-timber forest products. Among these, the majority was consisted of nutgalls, boxwood, and gums. Besides these products, ten British vessels carried full cargoes of bones and some timber for shipbuilding from the ports in the neighborhood of Istanbul. Another two vessels carried valonia and linseed to England from the ports on the coast of the Marmara Sea. In 1842, though the number of ships loaded for Britain increased, the forest products varied only a little. We see madder roots, valonia, and mastic in addition to the previous years' goods. There were also very few timber ships sailing for Great Britain and Antwerp.²⁰⁸ In general, it is clear that the forest products took little room when compared with other merchandize. The report of British Consul in Istanbul, dated 31 July 1841, informed that the Ottoman government was still considering the trade of salt, snuff, timber, staves, and aba cloth as part of the monopolies. Among these, exporting timber was called for a harder procedure. For example, the merchants who wish to purchase timber for shipbuilding were to apply first to the local governors for taking permit to cut timber, and the application was then sent to Istanbul for approval and nobody was sure about when the reply would come. For the trade of staves, it seems that an additional tax was demanded by the Porte to restrict its export instead of prohibiting altogether. The British consul claimed that if the state abolished monopolies and restrictions on the trade, the public treasury would receive much more revenues than it had now because the purchasers of monopolies were the most advantageous side in making profit under the remaining system.²⁰⁹

²⁰⁸ Data arranged from the Consular reports in Istanbul dated 31 Dec 1842 by: MacGregor, *Commercial Statistics*, p. 80.

²⁰⁹ *Ibid.*, p. 87.

The real change in the Ottoman provisionist and restrictive-prohibitive policies of the earlier period emerged in the 1860s with the commercial treaties of 29 April 1861, signed with G. Britain and France, and one year later with other European countries and the United States. The treaties prohibited all kinds of duties received from exported goods and fixed that a maximum of 8 percent was to be taken as export and import duty from agricultural products and manufactured goods. On the other hand, the export tariffs was to be reduced one percent each year until the rate fell to one percent, which took place in 1869.²¹⁰

The effects of the 1861 and 1862 commercial treaties began to be felt in the Empire in a very short time. Although they were welcomed in Europe as the Ottoman “liberal attitude to free trade,”²¹¹ in effect, not all the Ottoman politicians did welcome these treaties, since they were against the protective concerns of the bureaucracy. Especially the prohibition of all kinds of extra dues taken from exported items made it difficult for the Sublime Porte to receive internal duties from agricultural and forest products. According to the *Rüsumat Nizamnamesi* (Regulation of Taxes), 20 percent from large timber, 10 percent from small timber, and 15 percent from firewood and charcoal were to be taken apart from the export duty.²¹² However, from the communication between the Council of Public Works (*Meclis-i Me'abir*), the Superintendent of the Customs and Excises (*İhtisab Emini*), and the Supreme Council for Judicial Ordinances (*Meclis-i Vala*) we are told that

²¹⁰ Issawi, *Economic History of Turkey*, p. 75. Until 1891, the *ad valorem* duty of eight percent was imposed on all articles imported into the Ottoman Empire, whereas the export duty was decreased to one percent in 1869. In the early twentieth century, financial needs forced the government to start negotiating to increase the import duty three percent. Finally, in July 1907, it was increased to 11 percent *ad valorem*, but under the supervision of the Public Debt Administration.

²¹¹ Paul Auchterlonie, “From the Eastern Question to the Death of General Gordon: Representations of the Middle East in the Victorian Periodical Press, 1876-1885,” *British Journal of Middle Eastern Studies* 28: 1 (2001): p. 13.

²¹² BOA, “Varıdat-ı Rüşumiyye Hakkında Nizamname,” *Meclis-i Tanzimat Defterleri*, no. 1 (22 L 1274/5 June 1858). Cited in: Coşkun Çakır, *Tanzimat Dönemi Osmanlı Maliyesi* (İstanbul: Küre, 2001), p. 29.

except for the customs duty, the government took in practice 15 percent from firewood and charcoal; and 25 percent from every kind of timber. This order was said to be sanctified with a Supreme Council decree sent to the Customs Controller (*Gümrük Emni*) on 23 Za 1274/5 July 1858 which says that exporting wood to foreign countries was strictly forbidden without obtaining an imperial order as a proof of exportation.²¹³ However, as is stated earlier, according to the recently signed commercial treaties with the French and the British, the Ottoman government could not take any taxes apart from the customs duty. On the other hand, the foreign powers forced to annul such duties. For some time, the bureaucrats resisted to foreign demands on forest products in order not to lose much revenue, but when this became impossible due to foreign pressure, they introduced certain bypasses, such as the substitution of the internal duties with the *aşar* (tithe).

The following example displays how the Ottoman bureaucrats tried to cope with the provisions of the treaties and local regulations. The *Meclis-i Ahkam-ı Adliye* (Council of Judicial Ordinances) insisted that according to the *Rüsumat Nizamnamesi* internal duties were to be taken apart from the export duty. According to the Council, the eight percent export duty would lead to a sharp decrease in the revenues of the state. The Council, then, proposed to take at least a uniform 10 percent, like the agricultural products, as if it was a tithe.²¹⁴ The position of the Council concerning export duties is an interesting indication to the fact that the free trade agreements with European powers were not so easily implemented, and there existed considerable resistance in the Ottoman bureaucracy to economic liberalization.

While the Council was discussing the cost and benefits of the lastly signed trade treaties, the Ottoman government had already attempted to borrow a loan

²¹³ HK, *Doc. No. 204* (27 Z 1278/25 June 1862); HK, *Doc. No. 205* (27 Z 1278/25 June 1862).

²¹⁴ HK, *Doc. No. 210* (7 C 1279/30 November 1862).

from Europe and also to finalize the budgetary reforms. The British government sent two agents, Lord Hobart and M. Foster, to investigate the financial conditions of the Empire.²¹⁵ Their report was, in effect, an attempt to persuade the Ottoman government on the benefits of free trade. Acknowledging the Ottoman initiation of many reforms to assess and collect revenues, Foster and Hobart proposed a better financial administration and public accounting, which would largely increase the tax revenues of the Empire. Here, I will only cite the recommendations that were related with the commercialization of resources. For example, they suggested the government to collect taxes directly instead of farming out (*iltizam*), to assign a tax on the conversion of *vakıf* property into freehold, and to manage resources of the Empire, such as mines, forests, and other public property, in a rational manner. It seems that both the Ottoman government and the European powers believed that the real problem of the Empire was financial disorder, caused mainly by its detachment from the “ordinary rules of political economy and fiscal administration”, which was meant to be the principles of free trade and liberal market economy.²¹⁶

2.3. Free Trade Liberalism and Ottoman Forests

The free trade liberalization in the Ottoman Empire was not a direct result of the trade treaties. Beginning with the late eighteenth century, some liberal ideas on the economic development found a ground for discussion in the Ottoman

²¹⁵ Yerasimos, *Az gelişmişlik Sürecinde Türkiye*, p. 165.

²¹⁶ On this point, especially see the article in the *Times* published upon the report of Hobart and Foster. “Financial Condition of Turkey,” *The Times*, 6 May 1862, Issue 24238.

Empire.²¹⁷ Many ambassadors to Europe and public officials presented several memoranda to Selim III, usually offering reform proposals in almost all sectors of the state to remedy the financial difficulties.²¹⁸ The most important headings were the reorganization of the military supplies, capitation tax (*cizye*), extraordinary expenses, and shipbuilding; the development of domestic and foreign trade; the correction of coinage; the establishment of a budget; the improvement of taxation; the management of mines and alike. They remained usually on paper because of the inflexible character of the long-established economic policies like *yed-i vahid* (monopoly), *mubaya'a* (wholesale purchase at a certain price), and *narh* (officially fixed price).²¹⁹ Among these, only the *narh* system was more flexible and was occasionally rearranged until its abolition, except for meat and bread, in 1855.²²⁰

Though the majority of the above-mentioned proposals were economic and financial, it seemed that there was as yet no political will to apply these reform

²¹⁷ Ahmet Güner Sayar, *Osmanlı İktisat Düşüncesinin Çağdaşlaşması (Klasik Dönem'den II. Abdülhamid'e)*, 2 ed. (İstanbul: Ötüken, 2000 [c1986]), pp. 182-86.

²¹⁸ A few of these ambassadors and statesmen were Ebubekir Ratib Efendi, Halet Efendi, Şerif Efendi, Tatarcık Abdullah Ağa, Koca Yusuf Paşa, Emin Efendi, Abdullah Berri Efendi. For the memoranda of these people, see: Enver Ziya Karal, *Halet Efendinin Paris Büyük Elçiliği: 1802-1806* (İstanbul: İstanbul Üniversitesi Yayınları, 1940); Enver Ziya Karal, "Ragıp Efendi'nin Islahat Lâyihası: Mahmud II. Devri," *Tarih Vesikaları* 1, no. 5 (1941-42); Enver Ziya Karal, *Selim III'ün Hatt-ı Hümayunları: Nizam-ı Cedit, 1789-1807* (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu, 1988); Reşat Kaynar, *Mustafa Reşit Paşa ve Tanzimat* (Ankara: Türk Tarih Kurumu, 1985), 1-37. Another important 'liberalist' of the period was Halil Hâmid Paşa, who attempted to reform the Janissary Army, but failed and later killed. Ahmed Cevdet Paşa, *Tarih-i Cevdet*, 2nd ed., 12 vols., vol. 6 (İstanbul Darü't-Tıbaat'ül Amire, 1288-1309 [1871-1892]), pp. 4-5.

²¹⁹ Sayar, *Osmanlı İktisat Düşüncesinin Çağdaşlaşması*, p. 184.

²²⁰ The first quarter of the nineteenth century also unfolded a struggle between the theocratic (*şer'i*) and rationalistic (*akli*) state conceptualizations. See, for example, the famous poet and ulema Keçecizade İzzet Molla's memorandum to the Sultan Mahmud II in 1827: Keçecizade İzzet Molla, "Lâyihâ-i İzzet Molla," in *Tarih-i Lutfi* (İstanbul: Matba'a-i Amire, 1291 [1874/5]). This duality represented in the opposition movement against the effects of religious establishment in the administrative affairs after the Tanzimat.

policies until the Tanzimat. Although Selim III tried to introduce radical reforms, he did not gain any practical success. Following the destruction of the Janissaries in 1826, the Ottoman administration entered a phase of rapid institutional change; however, it is difficult to say whether this transformation followed a consistent course while taking concrete reformist measures. Until the Tanzimat, the pendulum swung between the protectionist-interventionist policies of the government and the liberalist-free tradist pressures of the foreign powers.

The ideas on liberalism and free trade on the way to an economic development entered into another phase after the destruction of the Janissaries, the last remnants of guild monopolism, in 1826. At about the same time, the belief that the Ottoman Empire constituted a potential market for the British goods and an important supplier for raw materials was taking a firmer ground. This was repeated rather frequently in commercial and travel literature and major newspapers of the period. For example, David Urquhart, who influenced the minds of politicians and public possibly more than any other foreigner in the Ottoman Empire of the time, claimed that:

[T]urkey ... possessed of the richest soil, raising every variety of produce, having unrivalled facilities of transport, abounding in forests and mines, opening innumerable communications with countries further to the east, with all which our traffic is earned on in English bottoms, where labour is cheap, where industry is unshackled, and commerce is free, where our goods command every market, where government and consumers alike desire their introduction. But all the advantages that may accrue to us from so favourable a state of things, is contingent on her internal tranquility and political re-organization.²²¹

Urquhart's praise was based on his conviction that there were almost no indirect taxes in the Ottoman Empire, which led him to believe that it provided an

²²¹ David Urquhart, *Turkey and Its Resources, Its Municipal Organization and Free Trade, the State and Prospects of English Commerce in the East, the New Administration of Greece, Its Revenue and National Possessions* (London: 1833), p. 216.

excellent ground for the application of British free trade policies.²²² In spite of this unsound conviction, he also exaggerated the physical conditions of the empire to entice the British politicians and the capitalists. Similar to Urquhart's statement about the political reforms, the majority of the contemporaries believed that the great hindrance to the development of commercial relations was the government and obsolete administration of the Ottoman Empire. However, though the political and administrative crises of the 1830s caused many disappointments about the potentiality of the Ottoman market for British goods, not less than India, there were still optimistic statements about a future tranquility in the Ottoman lands:

To England, as a commercial country, the knowledge of what Turkey now is, and the prospect of what, under a better government, it may *become* cannot be matters of indifference.... We are anxiously looking for extended markets for our manufactured produce, and, with the exception perhaps of India, there are few countries capable of absorbing a larger portion of our exports, and of supplying us with richer returns, than Turkey and the Levant *would* be, under the more favourable circumstances in which we may reasonably hope to see them placed when the Ottoman dominion shall have ceased to wither and depress their energies.²²³

According to the author, the British, while seeking new markets for its manufactures, did not have the luxury to disregard the Ottoman market because of its existing political conditions. Therefore, the British government was to consider the Ottoman market with the same attention with which they regarded India and elsewhere. More importantly, the author implies that the Ottoman Empire did possess rich resources, which would yield more profit to the British than to the Ottomans, if commercial relations intensified before the Ottoman government dried them up by wasting. Such preconceptions were murmured on various occasions,

²²² Şerif Mardin, "Türkiye'de İktisadi Düşüncenin Gelişmesi (1838-1918)," in *Siyasal ve Sosyal Bilimler. Makaleler 2* (İstanbul: İletişim, 1990), p. 60.

²²³ William R. Greg, *Sketches in Greece and Turkey: With the Present Condition and Future Prospects of the Turkish Empire* (London: J. Ridgway, 1833). Quoted in: "The Turkish Empire," *The Times*, 25 September 1833, Issue 15279. Emphasis is author's.

especially concerning Ottoman natural resource management, like in forestry and mining, until the end of the nineteenth century, which will be the subject of the next section.

It also seems to be that there was a considerable interest from the French side about Ottoman forests. In a document dated 27 June 1848, we are told that the (former) French Minister of Foreign Affairs and Prime Minister François Guizot asked for information on the forest rules and regulations in force before his expected visit to Istanbul. The document does not say much about the details, but the comment of Ottoman Foreign Ministry is worth mentioning. The secretary of the ministry states that the response of the government was affirmative to Guizot's inquiry (*icab-i sual*) and it contained information about the genuine state of Ottoman forests.²²⁴ The date of the Ottoman archival document does not match Guizot's terms of office, since he resigned from the prime ministry on 23 February 1848, one day before Louis Philippe's abdication.²²⁵ Still, one is compelled to ask why Guizot wished to learn about the Ottoman forest rules and regulations. Some possible answers would be: First, there were French merchants engaged in timber trade within Ottoman forests, who might have been harmed by the irregular taxes, especially the customs dues, and perhaps asked for a diplomatic intervention. Second, the speech of Guizot to the National Assembly in 1842 will display another important aspect of the French interest in the Ottoman Empire:

I am inclined to believe, in general, that it is little benefiting the policy and genius of France to essay new and great colonial establishments at a great distance from our territory...What is indispensable, is to possess at points on the globe which are destined to become great centres of

²²⁴ BOA, *HR. MKT. 21/8* (25 B 1264/16 June 1849).

²²⁵ The Ottoman government possibly did not reply his interrogation immediately because of miscommunication between the Ottoman consulate in Paris and Foreign Ministry in Istanbul.

commerce, sure and strong maritime stations to serve as support for our commerce.²²⁶

Like the British, the French politicians also considered the Ottoman Empire as an important outlet, or even a possible colony, for goods and a source of raw materials. In short, the period between 1830 and 1840 can well be labeled as the introduction of the economic liberalism, at least as an idea, in the Ottoman Empire.²²⁷ Be as it may, all of these beliefs and ideas intermingled in one major phenomenon, namely the Eastern Question. The Egyptian problem and the Russian threat combined together in this period and caused many troubles for the Ottoman administration. Thus, the Ottoman Empire became an arena for political and economic contestation of European powers.²²⁸ The economic recession in Europe in the 1830s and 1840s accelerated the controversies among the Great Powers, but at the same time tightened their relations with the Ottoman Empire.

Until the 1840s, the Ottoman free trade policies concerning forest products more or less echoed Prussian political economist Friedrich List's discussions in his *The National System of Political Economy* (1841), though he did not advocate a policy of prohibition and was against internal tariffs.²²⁹ Here, List argued for the importance of protective tariffs for developing economies on the road to industrialization. He was against the British free trade advertisements and laissez faire policies. He claimed that the British advocated free trade and condemned state

²²⁶ Robert Aldrich, *Greater France: A History of French Overseas Expansion* (New York: St. Martin's Press, 1996), p. 94.

²²⁷ Sayar, *Osmanlı İktisat Düşüncesinin Çağdaşlaşması*, p. 189.

²²⁸ For the relationship between political contestations and free trade policies, see: Daniel Verdier, "Democratization and Trade Liberalization in Industrial Capitalist Countries, 1830s to 1930s," *Comparative Studies in Society and History* 40, no. 4 (1998).

²²⁹ Friedrich List, *The National System of Political Economy*, Translated by Sampson S. Lloyd and with an Introduction by J. Shield Nicholson ((London: Longmans, Green and Co., 1909 [1841]).

intervention to economy since her economic power reached unprecedented levels thanks to the protective high tariffs to foreign manufactures during Britain's Industrial Revolution in the late eighteenth century. List emphasized the importance of a developed internal market, supported by good communication and transport systems, for wealth and power and for domestic economic development. In his critique of the advocates of the free trade policies, he mocked the Ottoman position *vis-à-vis* the commercial treaties of 1838:

The revenues of the kings of England were derived at that time more from export duties than from import duties. Freedom of export and duties on imports (*viz.* of manufactures) betoken at once an advanced state of industry and an enlightened State administration. The governments and countries of the North stood at about the same stage of culture and statesmanship as the Sublime Porte does in our day. The Sultan has, notably, only recently concluded commercial treaties, by which he engages not to tax exports of raw materials and manufactures higher than fourteen [twelve] per cent, but imports not higher than five per cent. And there accordingly that system of finance which professes to regard revenue as its chief object continues in full operation. Those statesmen and public writers who follow or advocate that system ought to betake themselves to Turkey; there they might really stand at the head of the times.²³⁰

List's critique of the Ottoman system of finance that regarded "revenue as its chief object" had a certain gist of truth. Between the sixteenth and the early nineteenth centuries, the decisions of the state on economic matters were not solely based on a system of production and management of material wealth. Usually they were interconnected with political, religious, military and financial aims and operations.²³¹

The attitudes of the Ottomans toward foreign trade were not uniform either. In the pre-industrial period, contrary to the mercantilist policies favored in Europe, the Ottomans did not accommodate protectionist economic policies, but instead applied restrictions and prohibitions on the trade of certain commodities. However,

²³⁰ Ibid., p. 39.

²³¹ Genç, "Osmanlı İktisadi Dünya Görüşünün İlkeleri," p. 43.

during the 1860s, after the government decided to open up its forests and mines to European competition, we see a clear, but unwilling, inclination to free trade policies for the exploitation natural resources. The reception of this determination in Europe was quite consistent with respect to the ideas and beliefs on the condition of Ottoman natural resources until the end of the nineteenth century.

2.4. European Views on Ottoman Forests and Forestry

On 12 December 1856, the *Times* correspondent in Istanbul send out a news report to London concerning the new proposed reforms of the Reşid Paşa government.²³² According to this report, we are informed that the Sublime Porte was taking into consideration the budgetary problems. The government might have been also distressed because of the debased coinage, and the paper money (*kaime*), which was first issued in 1839. The deteriorating financial conditions and the loans forced the government to find new solutions to the existent administrative and financial problems. The first of these was the “means of putting some kind of order into the expenditure.”²³³ The overriding question was the compounding of the individual ministerial funds into one general state budget. To this aim, Reşid Paşa informed the *Times* correspondent that the government was planning to introduce an ‘audit board.’²³⁴ However, it appeared that the Ottoman government was rather reluctant for a retrenchment in the budget in order not to affect intended investments. Thus, the major aim of the government emerged as an increase in revenues instead of a reduction of expenditures. Forest resources appeared to be

²³² “Turkey,” *The Times*, 24 December 1856, Issue 22559. Mustafa Reşid Paşa became the Grand Vizier in November 1856.

²³³ *Ibid.*

²³⁴ *Ibid.*

one important source to increase revenues of the treasury. Relying on the interview made with Reşid Paşa, the correspondent acclaimed that

[t]he State possesses very large forests in all parts of Turkey, which are turned to no account. Everybody is allowed to cut down as much as he pleases, and wherever he pleases. The result is not only that the Government receives not a para [asper] from all these extensive tracts of land, but that the forests are rapidly destroyed. It is now contemplated to establish forest laws, and a special administration of the State forests, according to the European mode.²³⁵

When the Ottoman government announced to open its forests to competitive bidding, it seems that the news from Istanbul on this issue spread through European newspapers very quickly. The opinions about the immense natural wealth of the Ottoman Empire drew the attention of European public again as it did since the pre-Tanzimat period. Moreover, by this time, many public agents extrapolated the amount of forests and mines resources, without a noteworthy knowledge on them that the Empire possessed.²³⁶ However, there were also doubts about such intentions. For example, one of the French experts in the Ottoman Empire, A. Bricogne mentions that such appreciations were proposed with certain sincerity because of the lack of precise information on natural resources of the Empire.

²³⁵ Ibid.

²³⁶ Osman Ragıb, “[Untitled],” *Tasvir-i Efkar*, 25 S 1279/21 August 1862. This was the first attempt to create a public opinion on the riches that forests could provide to the Ottoman economy and society. Osman Ragıb begins his article first by defining the term ‘silviculture’ as the science and management/administration of agriculture and forest (“*silvikültür tabir olunan ziraat ve orman fenn ve idaresi*”). He provides some statistical description of the French forests and forest service and how much the French government spent and in return made profits by exploiting its forests. Then he sets out to compare the Ottoman forests and concludes that the Ottoman state could produce more revenues from its forest if properly managed (according to the principles of silviculture), since they are more extensive than French forests. According to the calculations in the article, the extent of state forests in France, apart from the crown forests, was given as 1,077,046 hectares, whereof each hectares of forests could produce at least 34 francs annually. He then states that since the Ottoman state owned approximately 8,000,000 hectares of forests, it could extract nearly eightfold-revenue in comparison to French.

However, he also tried to justify why these ‘cornucopian’ considerations also possessed a certain gist of truth in them:

Besides it appeared probable that such a country having remarkable fertility ... that regions little opened to the trade, deprived of transportation routes, inhabited by very few populations, had preserved the massive forest resources intact which nature had created with abundance, beneath these latitudes and in these places eminently suited to the growth of the most beautiful forest species.... Although the vast plateaus of Asia Minor and Mesopotamia did not present the traces of formerly powerful vegetation any more, they believed the existence of considerable forest assets in the Balkan Peninsula and on the mountain chains from the Mount Ararat to Lebanon surrounding Ottoman Asia.... They were mistaken, and however one must admire, in the presence of the imposing relics of the past, how much Providence was overgenerous of its gifts towards these regions very impoverished today.²³⁷

This ideas about the vast and rich natural resources of the Ottoman Empire spread probably through the works of Tournefort, Tavernier, D'Ohsson, Von Hammer and others, who rather presented the ‘exotic’ natural conditions in the East, which served the European public what they wanted.²³⁸ This tradition continued in the early nineteenth century by the commercial treaties on the economic possibilities in the Ottoman Empire and the Levant. For example, MacGregor depicted the commercial capabilities of the Balkans in a very ‘appetizing’ style:

Turkey in Europe ... has, with a soil in most parts remarkably fertile, a highly favoured climate, which ripens in perfection the vine, olive, maize, wheat, and rice; most culinary vegetables; delicious fruits; tobacco, flax,

²³⁷ Bricogne, “Les fôrets de l’empire Ottoman,” p. 273. Translation is mine.

²³⁸ Joseph Hammer-Purgstall, Freiherr von, *Histoire de l’empire Ottoman: depuis son origine jusqu’à nos jours*, trans. from the German by J Hellert, Imprint 2nd ed., 10 vols. (Istanbul: Les Editions Isis, 1993 [c. 1835]). Jean-Baptiste Tavernier, *Les six voyages de turquie et de perse*, ed. Introduction and notes by Stephane Yerasimos, Imprint ed. (Paris: Maspero, 1981). Joseph de Tournefort, *Tournefort Seyahatnamesi*, ed. Stefanos Yerasimos, trans. Ali Berkay and Teoman Tunçdoğan (İstanbul: Kitap Yayınevi, 2005). M. de M. (Mouradgea) D’ohsson, *Tableau général de l’empire Ottoman: divisé en deux parties, dont l’une comprend la législation mahométane: l’autre, l’histoire de l’empire Ottoman: dédié au roi de suède* (Istanbul: Isis, 2001).

hemp; the mulberry; the *Cistus Creticus* (which produces the gum ladanum); the *Astragalus Tragacantha* and *Astragalus Creticus* (both which yield the gum tragacanth of commerce); the *Pistacia Lentiscus* and the *Pistacia Terebinthus*, yielding the gum resins, mastic, and terebinth of commerce; and, in the southern provinces, the sugar-cane and cotton-tree. Excellent durable timber for ship-building, and other wood for useful and ornamental purposes, are also abundant. Add to which, rich pasturages for horses, horned cattle, and sheep; plenty of fish abounding along the coasts and in the rivers, game in the forests, and the abundance, from the little trouble in rearing bees, of honey; with the mineral riches (little however explored); then, the excellent harbours and admirable position of European Turkey, and we may have a general idea of her great natural resources.²³⁹

The image of the Ottoman Empire as of having a vast and fertile territory, but on the other hand, politically and economically weak in proportion to its vastness due to the scarcity of population, gained a solid ground in the literate circles of Europe. Even the Ottomans themselves adhered to the components of these ideas after the Tanzimat period. As a consequence, the concepts of ‘production’ and ‘procreation’ became to shape the economic and demographic policies of this period. When we come to the 1870s, though the experience of previous decades undermined the ideas about Ottoman potentiality, there was still a strong trust in the physical capacity of Ottoman natural resources, which could be converted into revenue by capitalist investment:

It cannot, it is true, be denied that the resources of Turkey are still less than half developed; that thousands of square miles of its best soil are untilled; that its forests are unproductive, and its minerals unworked; but it is exactly because the resources of the Empire are undeveloped, because its forests are virgin, its plans untilled, and its mines unworked, that it contains and offers to capitalists all the elements of a splendid security for any money which may be spent in realizing those enormous natural riches. If the country were worked out, its forests cut down, and its deposits of coal, copper, silver, and lead exhausted, the risk of lending it might then reasonably enough be alleged... The great hindrance, however, to the full development of the vast natural resources of the Empire lies in the backward state of its public works, particularly in the means of transport. Good roads and inexpensive railways are wanted to improve the communication between existing business centres, and open up vast tracts

²³⁹ MacGregor, *Commercial Statistics*, pp. 1-2.

of country which have, at present, no outlet for their products. The obstacles to the navigation of many rivers demand removal, so as to facilitate the transit of produce from the interior. Docks and wharves requires to be constructed, and warehouses to be built, tracts of country to be drained, towns to be lighted, cleansed, and supplied with water, agriculture and manufacture encouraged, telegraphic communication extended, and mines –coal, iron, silver, lead, &c.– to be worked. When Turkey with an administration at the Porte more in accordance with modern ideas possesses these public works, she will be one of the richest countries in the world.²⁴⁰

The European interest, at least British, in the natural resources of the Ottoman Empire did never lost its earlier vigor almost until the end of the nineteenth century. However, an in depth research in the Times newspaper and other commercial and travel literature will show that the British public did not pay attention to the French endeavor in assisting the Ottoman government’s attempt to establish a rational forest administration after the Crimean War. It is interesting enough to notice that at about the same period, the British government relied on German forest experts, while struggling to control the forest resources in her colonies.²⁴¹

While the Ottoman government was steadfastly striving to find solutions to the financial problems of the state, the Times correspondent in Istanbul informed the European public that the Ottoman attitude towards its natural resources reminded the fable of the dog-in-the-manger:

Stamp duties are also to be levied throughout the whole empire, while the petty internal duties which now press so heavily on native produce will be forthwith removed. But, besides these sources of revenue, the Government have at last profited by the advice tendered them for many years, and have resolved to open up the mines and forests of the country, which have been an object of longing speculation to many an European mining company. At present the whole system of leasing mines has been

²⁴⁰ “Turkish Financial Reform,” *The Times*, 24 October 1873, Issue 27829.

²⁴¹ Rajan, “Imperial Environmentalism or Environmental Imperialism?”; James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Conditions Have Failed* (New Haven: Yale University Press, 1998).

hampered by feelings of jealousy and ignorance, illustrating very powerfully the old fable of the dog in the manger.²⁴²

Before a discussion of the fable in relation to the Ottoman position *vis-à-vis* the European capitalists, it is worthwhile to recall that after the 1870s, the Ottoman government introduced a reform policy by codifying essential rules and regulations to open up the exploitation of Ottoman natural resources to international capital and expertise. I will examine the major tenets of these codifications in Chapter 4.

Aesop's fable is on a lazy dog and a hardworking pair of oxen living on the same farm. One day, when the oxen came from a day's hard work to feed themselves on, the dog was sleeping on the hay in the manger. While the oxen began eating the hay, the dog awakened. Running back and forth and barking in the manger, he prevented the oxen from eating, though he has no use for the hay. Finally, the oxen left the manger. On the way to their stalls, one of them, as the fable continues, said to the other: 'I don't understand this dog. I just don't understand him at all. He can't eat that hay himself and will not permit it to be eaten by those who can.'²⁴³ Literally, 'a dog-in-the-manger' specifically refers to "someone who selfishly and offensively prevents others from enjoying something even though one has no particular interest in it at all."

Since the Ottoman government officially announced that it would open its natural resources, specifically forests and mines, to competition after the Crimean War, rumors had been floating among European capitalists and intellectuals that the Empire had extensive natural sources of wealth. But about two decades later, many of the European entrepreneurs and Ottoman bankers and concessionaires were still waiting the Ottoman government to finish the codification of the rules and procedures.

²⁴² "Turkish Financial Reform," *The Times*, 7 November 1873, Issue 27841.

²⁴³ Leonard Mann, *A Bird in the Hand and the Stories Behind 250 Other Common Expressions* (New York: Printence Hall General Reference, 1994), pp. 57-58.

Essentially, by using the dog-in-the-manger metaphor, the Times correspondent intended to say that the Ottomans did ‘want the penny and the bun’ together. But the analogy had more repercussions. The correspondent was in fact trying to say that the Ottoman government should not fear from the European knowledge and capital for exploiting its natural resources. The correspondent asserted that the Europeans were trusted friends of Ottomans, thus, if the government did not have the necessary technology and capital to exploit its natural resources, then it should enable the European companies to do the job for the Ottomans. A sign of this argument can be found in another Times news report from the Ottoman capital. On 29 October 1873, the Istanbul correspondent mentioned the failure of the Tobacco *Régie* administration and inferred that had the government taken the counsel of the Europeans on applying the system that successfully worked in Italy, the treasury would have received more revenues than it had now. But the Ottoman government, as the correspondent concluded, “rejected [the system] through a short-sighted jealousy of foreign influence.”²⁴⁴

The argument of the correspondent is quite unwarranted, because more than a decade had been past since the Ottoman government resolved to entrust the working of mines and forest to the hands of the private investors, but neither the mines nor the forests drew the attention of the European capitalists. On the other hand, Ottoman moneylenders and bankers were not interested much with the exploitation of the mines and forests.²⁴⁵ Nevertheless, the feeling that the ‘immense’ forests of the Empire would bring, if properly managed, important revenues to the central treasury had been remained intact:

²⁴⁴ “Money, Market & Intelligence,” *The Times*, 29 October 1873, Issue 27833.

²⁴⁵ [Ali Rıza], “Orman ve Mer’a Kanununun Esbab-ı Mucibe Layihası,” *Orman ve Ma’adin ve Zira’at ve Baytar Mecmu’ası* 3 (1326 [c. 1910]); reprinted as: [Ali Rıza], *Orman ve Mer’a Kanununun Esbab-ı Mucibe Layihası* (İstanbul: Mahmud Bey Matbaası, 1328).

[b]earing in mind the use to which Turkey has applied the money borrowed, and the augmentation of her income which will unmistakably be the result when more order is established in assessing and collecting the taxes; considering the increase of revenue which may be anticipated on the completion of the railways now in course of construction; and taking, finally, into consideration the unexplored mines and forests of the Empire, it may be assumed that the present financial embarrassments of the country ought to suggest no serious alarm for the Government, or for Western European capitalists.²⁴⁶

The so-called “financial embarrassments” caused by the burden of the loans, contracted since 1854, reached to a considerable point. The government could not increase the revenues substantially, due to inefficient taxation and the lack of infrastructural investments. The revenue of the Empire was still much lower than the expenses. The state loans had been used to compensate for the budget deficits in many occasions. Nonetheless, the Ottoman government had introduced new fiscal reforms to increase the revenues of the treasury and to establish equilibrium in the budget around mid-1870s. To this end, it decided to secularize the *vakıf* property and extend the tobacco monopoly throughout the Empire instead of confining it only to Istanbul; to regulate the collection of the tithe and abolish some of the internal customs which impede the development of agriculture and commerce in the provinces; to rearrange the higher-ranking officials' salaries; to collect the stamp tax in all parts of the Empire.²⁴⁷ Another reform was the appropriation of land tax (*virgü-yi arazi*) to the capital and other privileged regions of the Empire, which were formerly exempted.²⁴⁸ As regards to the regulation of the tithe, the Porte planned to institute direct collection, or at least a fixed rate in place of the farming out. The government also planned to extend the property tax (*emlak virgüsü*) to the whole Empire. Formerly a land and property evaluation was attempted in Izmir and

²⁴⁶ “Turkish Finance,” *The Times*, 13 February 1871, Issue 26985.

²⁴⁷ Roderic H. Davison, *Reform in the Ottoman Empire, 1856-1876* (Princeton, N.J.: Princeton University Press, 1963).

²⁴⁸ “Turkish Financial Reform.”

had produced rather good results as well as provoking resistance.²⁴⁹ However, its application throughout the Empire needed foremost a cadastral survey. Even before, the government decided to abolish the eight percent customs duty on the local produce to increase the productive capacity of trade and agriculture.²⁵⁰ The farming out of mines and forests by public competition was also still on the agenda of the government.²⁵¹

Although the planned reform for farming out the mines and forests was welcomed in Europe, it also aroused suspicion as to the amount revenue resulting from it. Many critics of the Ottoman Empire stressed the waste of money and corruption, but at the same time re-admitted the great productive, but unutilized, capacities of the Empire:

The mineral and forested wealth of the country is simply enormous, but the development of either—even if it be now at length seriously undertaken—must be a work of time, and can bring but little, if any, immediate relief to the Treasury. The undoubted existence, however, of these splendid resources is an element of credit which has even a present money value, if the Porte will only give some better proof than paper promises of its resolute purpose to turn them into gold. How wide and virgin a field the country affords for profitable enterprise in this direction is shown by the fact that, while the mines and forests of sterile Greece yield a revenue of 40,000*l.* a year, those of Turkey, thickly studding territory nearly hundred times larger, produce less than 20,000*l.*²⁵²

Although there was no available data on the forest revenues for the 1870s, if we assume that the figure provided by the correspondent was correct, the Ottoman government was certainly aware of its insufficiency. Whenever there was a proposed reform for rearranging the budget, the question about the natural

²⁴⁹ Alp Yücel Kaya, “Politics of Property Registration: Cadastre of Izmir in the Mid Nineteenth Century,” in *New Europe College Yearbook* (forthcoming 2006).

²⁵⁰ “Money, Market & Intelligence.”

²⁵¹ Also see: “Turkey,” *The Times*, 17 October 1873, Issue 27823. Also see: “Money, Market & Intelligence.”; “Turkish Financial Reform.”

²⁵² “Money, Market & Intelligence.”

resources of the empire came to the front side by side with other revenue-bearing sectors of the economy. In April 1874, the government established a special commission to arrange and estimate budgetary revenues for the year of 1874-75. The commission expected an increase of 134,000*l.* (about 14,6 millions *guruş*) from “the measures of reorganization which are about to be introduced into the exploitation” of forests.²⁵³ This estimate was again based on the assumption that the timber wealth of the empire is enormous, but had been neglected up to that time. In fact, this fictitious sum did not rely on any previous generated income, since there were no systematic account of revenues of the forests until that time. The Budget was supposed to be drawn up according to a set of regulations sanctioned by an imperial decree, dated 6 July 1290/18 July 1874, of which the first article absolutely prohibited the increase of any of the expenses, or the abandonment of the least amount of the revenues fixed by the budget. Under these regulations, the revenues were divided into two categories: the direct and the indirect. The first category included the imposts, like the fixed contributions to be paid by the privileged provinces, and the military exoneration tax. The second comprised of the tithes, mine-royalties, forests and lands, customs, sheep-tax, tobacco, salt, spirits, stamps and various other taxes.²⁵⁴

The Minister of Foreign Affairs sent a dispatch on 15 October 1873 to the Ottoman ambassador in London, which asked for making public the measures of fiscal reforms that the Ottoman government announced lately. A translation of this dispatch was published on the October 23 issue of the *Times*. The ambassador was

²⁵³ Previously, there established two similar commissions in 1859 and 1866. For example, the ‘Financial Council’ of 1859, including British, French, and Austrian members, was demanded to report the financial conditions of the empire and to propose fiscal reforms. “The Turkish Budget,” *The Times*, 15 April 1874, Issue 27977.

²⁵⁴ Vincent H. Caillard, “Turkey. Geography and Statistics,” in *The Encyclopaedia Britannica* (London and New York: Encyclopaedia Britannica, 1911).

told that the government was introducing new measures to ameliorate the condition of the finances and to augment the vast resources of the Empire. Among these, the most important one was thought to be the secularization of the *vakif* properties. It was said that the *vakif* properties situated in Istanbul were secularized and the possessors would receive new title deeds soon, which would give a higher profit and “the largest security for their rights as proprietors.” Moreover, the minister told the ambassador that a tax would be levied on real property, which was also to be applied to the *vakif* property throughout the Empire. He added that for carrying out this measure, the survey commissions were convened and the cadastral registrations would begin without delay, since the instructions to these commissions, the forms of registers and title deeds and the regulations on collecting the taxes were already prepared. The remaining sections of the dispatch mention the reforms on the tobacco monopoly, on the stamp tax, on the tithe, the property-tax (*temettu‘at*), and the indirect taxes, and on the budget of 1874-75, which also promised a retrenchment. For the natural resources, the minister declared that the working of the mines and forests throughout the Empire would be offered to the public by tender, and the government was completing the regulations for this purpose, which would offer far-reaching opportunities considering the incalculable natural riches of the Empire.²⁵⁵

The European attitudes toward the proposed Ottoman reforms since the 1870s varied sharply. While the general director of the Imperial Ottoman Bank in Istanbul, Foster, informed the British government that the Ottomans were seriously considering the necessary measures to immediately initiate these fiscal reforms, another observer of the Ottoman finances, J. C. M., severely criticized these policies and appealed to refuse further borrowing by the Ottomans from Europe.²⁵⁶

²⁵⁵ “Ottoman Finance,” *The Times*, 21 October 1873, Issue 27826.

²⁵⁶ “Money, Market & Intelligence,” *The Times*, 20 October 1873, Issue 27825.

J.C.M. claimed that the question was not the total debt of the Ottoman Empire, but how the government had been using this money. For him, more than three-fourths of the whole debt was spent by the palace and corrupted administrative officials, which “enriched successive Ministers and a numerous tribe of Galata bankers, while the country has become poorer and more embarrassed every year.”²⁵⁷ Then he set out to criticize the outcomes of the loans spent in the construction of ironclads, the scattered railway lines in Anatolia and the Balkans that could not probably meet running expenses due to the corruption among local officials, and other unproductive public works, which altogether drained the central treasury. Concurrently with these expenditures, he claimed, administrative tools utilized for reform since the Crimean War had been bringing ruin to the country’s resources. He ends his remarks by arguing that since the Ottoman government

[w]ill never be driven to develop these splendid resources of mine, forest, and virgin soil till the easier remedy of borrowing is denied to it; and in counselling English capitalists the other day to hold their hands now and refuse the Sultan another shilling you gave eminently wise advice in the equal interest of the country and of all who have a stake in its future. Some serious efforts must, then, be made to turn the vast natural wealth of the country to account, and economy in the meantime may be enforced on both Porte and Palace. If this be not done, there is no logic in events, nor any truth in Adam Smith, or the severest crisis that has ever yet befallen Turkey is near at hand.²⁵⁸

The author fulminates against the ‘ignorant’ Ottoman administration, which was unaware of modern economic policies, on the way to develop vast natural wealth of the Empire, without stating his reasons thereof. However, there are some more tangible contemporary critiques. For example, J. Lewis Farley, the Ottoman Consul at Bristol and author of *Modern Turkey*, averred that during the administration of Fuad and Âli Paşas, the Ottoman government had the trust of foreign politicians and capitalists, and between 1856 and 1871, until the death of

²⁵⁷ Ibid.

²⁵⁸ Ibid.

Âli Paşa, the Empire developed quite rapidly. He then sets out to criticize the farming out of tithes, which, he claims was detrimental to the public treasury and a heavy burden to the agricultural population. For him, since the tithe was an important source of revenue, the farming out of it in Anatolia and Syria was to be abolished in favor of direct collection. By this way, he argues, the revenue returns from the state forests could be increased in considerable amount.²⁵⁹ But he was not aware that the government practiced the direct collection earlier in the 1840s, but due to its failure, it was abandoned in a very short time. Then, as was the case with the agricultural revenues, the system of farming out was re-introduced in the case of the tithes from forest products. They were offered by public auctions and sold to the highest bidder, provided that the contractor was capable of meeting the financial obligations and of finding a reliable surety/guarantor. However, this was not the only system that was practiced. The Forest Administration also carried out a couple of tenders and auctions concerning timber products since the 1860s. The problem was not very much with the way of collecting the taxes, or commercialization of forests, but with the internal limits of forest management within the Empire and the shift of European attention to the resources of Africa and Asia.

The natural resources of the colonized lands in Africa and Asia brought Europe ample sources of wealth. Among them, the most crucial ones were the forest and its products. One after another, the European powers established forest departments and began to exploit the forests according to the principles of ‘rational’, or scientific, forest management. From this time onward, it seems that the interest in the Ottoman forests began to disappear. The complaints about the disinterestedness of foreign capitalists and the Ottoman inability to develop its forests had close connections with the colonization of Africa and Asia and technological backwardness of the Empire. By this time, the European attention shifted to the inner parts of Africa and Asia, especially to the tropical regions. The

²⁵⁹ “Turkish Financial Reform.”

vast resources of timber, crops, minerals and other raw materials became economically very profitable after the European powers' penetration deeply into the formerly impenetrable parts of these continents.²⁶⁰

2.5. Foreign and Domestic Trade in Forest Products

By the end of nineteenth century, despite the liberalization of trade and the Ottoman inclination toward marketization of forest resources, the state could not provide sufficient timber to meet neither domestic nor foreign demand. Much timber had to be imported in later nineteenth century, either because local timber was unsuitable or because they were too costly and difficult to extract due to the transportation and labor costs. A few examples of the volume of trade in forest products between European countries and the Ottoman Empire will highlight the real nature of marketization and commercialization of forests products. Over and above, during this period, the Ottoman state became a net importer of timber. The following table shows the net imports and exports of European countries (average data, calculated from the returns between the years 1900-1903).

²⁶⁰ However, two major problems made the colonization and control rather difficult: the disease in Africa and the centralized states in Asia. The Europeans soon overcame these obstacles by the discovery of quinine and by the use of arms. Daniel H. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (London and New York: Oxford University Press, 1981), 58-74; Williams, *Deforesting the Earth*, 253-54. Interesting to note that as the quinine which cured malaria extracted from the cinchona bark dropped the mortality rates and saved many lives, other forest resources contributed to the supply of raw materials and developed the individual economies in Europe.

Table 1: Average net imports and exports of timber for some European countries and the Ottoman Empire, 1900-1903.

Countries	Imports	Exports
	Value in £ Sterling ¹	
United Kingdom	26,540,000	
Germany	14,820,000	
Belgium	5,040,000	
France	3,950,000	
Italy	2,100,000	
Spain	1,500,000	
Denmark	1,250,000	
Holland	720,000	
Switzerland	480,000	
Ottoman Empire ²	300,000	
Portugal	200,000	
Serbia	160,000	
Greece	130,000	
Austria-Hungary with Bosnia and Herzegovina		11,400,000
Russia with Finland		10,440,000
Sweden		7,930,000
Norway		2,200,000
Romania		840,000
TOTAL	57,190,000	32,810,000
Net Imports	24,380,000	

Source: after *Encyclopaedia Britannica*, 11th edition, v. 10, p. 648.

¹ 1 £ Sterling ≈ 25 francs ≈ 108.5 *guruş*

² Source: after Güran, *1897 İstatistik Yılığ*, p. 200. The data was for the year 1894/95 (See Table 2).

The only timber-exporting countries of Europe were Russia, Sweden, Norway, Austria-Hungary and Romania; all the others either had only enough for their own consumption, or imported timber. Holland, France, Portugal, Spain and Italy are all importing countries, as also was the Ottoman Empire. These net imports for Europe were received from non-European countries. They consisted

chiefly of valuable hardwoods, like teak, mahogany, eucalyptus and others, such as pine and fir.²⁶¹

On the other hand, non-timber products continued to be one of the most commercialized exports of the Ottoman economy. When the figures for these products added to the timber imports and exports, the Ottoman Empire then became a net exporter, thanks to the export of valonia, which consisted of more than half of the total forest products exports. Thus, including the exports of non-timber forest products, the total Ottoman net exports then reached to 332,158-pound sterling in the year 1894.

Table 2: Value and percentage shares of exported and imported forest products in 1894.

Type of Commodity	Import	Export	Trade Surplus	Trade Deficit	Percentage	
	<i>Guruş</i>		<i>Guruş</i>		Import	Export
Ebony and boxwood	632,264	1,279,469	647,205	-	1.28	1.50
Walnut	593,973	1,283,444	689,471	-	1.20	1.50
Fruit and non-fruit trees	163,805	21,514	-	142,291	0.33	0.03
Firewood	196,605	547,889	351,284	-	0.40	0.64
Barks	418,133	908,111	489,978	-	0.85	1.06
Timber	36,461,430	3,432,035	-	33,029,395	73.77	4.02
Gum tragacanth	9,388,536	7,194,777	-	2,193,759	19.00	8.42
Cork	308,222	-	-	308,222	0.62	0.00
Nutgall	37,886	12,184,381	12,146,495	-	0.08	14.26
Valonia	15,120	57,761,156	57,746,036	-	0.03	67.58
Resin	203,420	115,333	-	88,087	0.41	0.13
Resin oil	341,708	0	-	341,708	0.69	0.00
Leaves	65,444	681,667	616,223	-	0.13	0.80
Pitch and tar	599,694	55,702	-	543,992	1.21	0.07
TOTAL	49,426,240	85,465,478	36,039,238	-	100.0	100.0

Source: Güran, *1897 İstatistik Yılığ*, pp. 200-202.

²⁶¹ Schlich, "Forests and Forestry," p. 648.

By the end of the nineteenth century, gum tragacanth, used in pharmacy, adhesives, and textile printing, was the major import figure of the Ottoman state after timber. Both constituted more than 90 percent of total import value. On the other hand, the major goods of export were valonia and nutgall, which comprised of about 82 percent of the total exports. Overall, the trade in timber and non-timber forests products was almost insignificant when compared to the total value of Ottoman exports. They constituted only two percent of total imports and about six percent of total exports in 1894.²⁶² The following table will give more information on the Ottoman export trade by the end of the nineteenth century:

²⁶² The percentages are calculated from the data provided by the official Ottoman statistics: Tevfik Güran, ed., *Osmanlı Devleti'nin İlk İstatistik Yıllığı 1897 [First Statistical Yearbook of the Ottoman Empire]*, Historical Statistics Series, Vol. 5 (Ankara: Devlet İstatistik Enstitüsü, 1997), pp. 199-202.

Table 3: Amount and percentage shares of forest products exported to Europe, 1897.

Products	Total (100 kg)	Percentage Shares								Percentage by product
		England	France	Russia	Austria	Germany	Italy	Greece	Bulgaria	
Alkanet	1,760		100.0							0.08
Bitter almonds	2,172			100.0						0.10
Boxwood	332,957	96.4				3.6				14.67
Cockspur	174		74.1			25.9				0.01
Cockspur root	37,914	63.6	16.5		8.4	11.6				1.67
Gum tragacanth	159,845	22.7	68.0		6.2	0.3	2.7			7.04
Kola	500		100.0							0.02
Licorice root	84							100.0		0.00
Lime flower	17,234		100.0							0.76
Nutgall	524,996	7.5	73.3			19.2				23.13
Pine bark	222,270			23.2				76.8		9.79
Pomegranate shell	800				100.0					0.04
Tar	3,275				6.1			11.5	82.4	0.14
Valonia	646,371		100.0							28.47
Walnut	319,827		100.0							14.09
TOTAL	2,270,179	18.5	65.4	2.4	0.6	5.2	0.2	7.5	0.1	100.0

Source: after Güran, *1897 İstatistik Yıllığı*, p. 180.

Table 3 gives valuable information on the amount and destination of forest products for the late nineteenth century, though they are not enough to make comparisons on the long-term trends and changes in volume of export trade in the Ottoman Empire. The major purchasers of Ottoman forest products were France and England, who purchased together more than 80 percent of the total amount of Ottoman exports. The non-existence of figures for timber, except for boxwood, might be an indication of restriction of official export. For example, the export of boxwood from the province of Trabzon to England had been restricted because of the difficulties raised by the government since the 1890s.²⁶³ The origin of this restriction was the corruption in the auction sales. A local merchant, Hacı Bogos, bribed the local forest officials to obtain the contract for the boxwood tendered from the state forests with the help of the ex-subgovernor of Sürmene, Ahmed Galib Efendi, who mediated between the merchant and the local forest administration. After the incident reported to the central government, the auctions were cancelled in 1889.²⁶⁴ But from the data displayed in Table 3 it seems that the boxwood trade was reviving again.

The major items of trade were valonia, nutgall, and to a certain extent boxwood and walnut. France was the only purchaser of valonia and the biggest of nutgall, both used for tannery. The valonia trade was always being very lucrative business. A productive tree could give annually, from August to September, about

²⁶³ Vital Cuinet, *La turquie d'asie. Géographie administrative statistique descriptive et raisonnée de chaque province de l'Asie-Mineure*, vol. I: L'Anatolie orientale: Trebizonde, Erzéroum, Bitlis, Van, Diarbékir; vol. II: Les provinces arabes: Alep, Mossoul, Bagdad, Bassorah; vol. III: Provinces des Îles de l'Archipel et de la Crète; vol. IV: Vilayet de Constantinople et Mutessariflik d'Ismid; vol. V: Le Vilayet de Smyrne et le Mutessariflik de Bigha; vol. VI: L'Anatolie centrale: Angora, Koniah, Adana, Mamouret-ul-Aziz, Sivas; vol. VII: L'Anatolie occidentale: Brousse et Castamouni (Istanbul: ISIS, 1891-94), vol. 1, p. 23.

²⁶⁴ BOA, *DH. MKT. 1467/73* (18 Ra 1305/4 December 1887); BOA, *DH. MKT. 1580/93* (28 R 1306/1 January 1889).

250 to 1,000 kilograms of acorns. The wood of the valonia oak (*Quercus macrolepis*, or *Quercus aegilops*) is also used for fuel, constructions and several other uses, but it was mostly preferred for the tannin which constituted 30-35 percent of each acorn,²⁶⁵ whereas a nutgall, the acorns of *Quercus robur*, could yield 27-30 percent. Besides the valonia exported from the state forests, there were also oak plantations belonging to private individuals, especially in the district of Biga and the province of Aydın. For example, the plantation of oaks comprised of 35 percent of total land in Biga around the end of the nineteenth century. From them, the government received tithe in kind bringing an average value of 1,000,000 *guruş* in the 1890s.²⁶⁶ The valonia production was also an important area of employment for local people.²⁶⁷ On these grounds, the valonia oak forests became the object of conflict between the state and local powerholders, who acquired large tracts of forest lands, especially in Aydın province in the nineteenth century.²⁶⁸

The scope of domestic trade was much more difficult to assess. Although the figures for the year 1897 give an idea about the volume of trade and variety of products, there is almost no official statistics to determine the extent of domestic commercialization of forest products in the nineteenth century. The numbers provided by the forest officials usually indicates the controlled trade, which was probably much lower than the real figures.

²⁶⁵ Tuğrul Mataracı, *Ağaçlar: Marmara Bölgesi Doğal-Egzotik Ağaç ve Çalıkları*, 3rd ed. (İstanbul: TEMA, 2004), p. 296.

²⁶⁶ Cuinet, *La turquie d'asie*, vol. 5, p. 283 and 286.

²⁶⁷ In Izmir, for example, 10,000 workers, whose daily wages are 20 to 30 *guruş* for the men, 8 to 15 for the women, and 4 to 5 *guruş* for the children were employed only for collecting and sorting. Ibid., vol. 5, p. 40.

²⁶⁸ The consequences of this conflict will be dealt in Chapter 5.

Table 4: Amount of wood cut for fuel in the Ottoman Empire, 1897.

	Firewood (metric tons)	Charcoal (metric tons)
Adana	7,083	386
Aegean Islands	7,750	603
Aleppo	225	71
Ankara	1,125	2
Aydın	18,250	19,086
Biga	17,650	1,920
Çatalca	750	21,125
Edirne	40,800	51,765
Hüdavendigâr	10,000	1,095
Işkodra	9,750	5,834
Izmid	86,500	14,905
Kastamonu	50,750	192
Konya	22,950	8,123
Kosova	28,750	1,385
Manastir	15,000	6,322
Sivas	3,125	500
Syria and Beirut	1,650	4,866
Thessaloniki	103,900	69,230
Trabzon	17,250	643
TOTAL	443,258	208,052

Source: after Güran, *1897 İstatistik Yılığ*, p. 177.

As seen in Table 4, cuttings for firewood production was mostly organized in Thessaloniki, Izmid, Kastamonu, and Edirne. Except for Kastamonu, the other tree provinces were also the most important centers of charcoal production together with Çatalca. Their proximity to the Ottoman capital shows that the main purchaser of fuel from these provinces was Istanbul. The Table 5 and Figure 2 will give a better idea on the places of production and consumption for firewood and charcoal. By comparing Table 4 and Table 5, we will see that firewood was mostly consumed in the places of production, whereas charcoal was exported either to other provinces or abroad. Adana and Aegean Islands were the major exporters of both firewood and charcoal.

Table 5: Amount and value of firewood and charcoal consumed in the provinces, 1897.

	Firewood			Charcoal		
	Amount (metric tons)	Value (piasters)	V/A	Amount (metric tons)	Value (piasters)	V/A
Adana	333	3,755	11.29	0	0	
Aegean Islands	1,125	5,625	5.00	1	30	35.43
Aleppo	225	1,125	5.00	31	1,430	46.06
Ankara	17,250	86,250	5.00	283	12,128	42.84
Aydın	16,750	114,500	6.84	7,893	397,572	50.37
Biga	17,650	141,200	8.00	845	60,435	71.51
Bursa	7,750	49,600	6.40	265	28,200	106.28
Çatalca	750	6,000	8.00	9,300	325,422	34.99
Edirne	40,800	273,200	6.70	22,789	1,054,119	46.26
Işkodra	9,750	78,000	8.00	2,569	36,400	14.17
Izmid	86,500	588,200	6.80	6,562	218,274	33.26
Kastamonu	47,500	304,000	6.40	85	2,250	26.57
Konya	0	0		2,467	218,500	88.57
Kosova	28,750	115,000	4.00	610	8,640	14.17
Manastir	15,000	60,000	4.00	2,783	44,400	15.95
Sivas	3,125	14,625	4.68	220	4,875	22.14
Syria and Beirut	1,650	33,000	20.00	2,142	360,710	168.37
Thessaloniki	103,900	470,750	4.53	5,171	1,027,697	198.73
Trabzon	10,375	51,500	4.96	482	22,204	46.06
TOTAL	409,183	2,396,330	5.86	64,498	3,823,286	59.28

Source: after Güran, 1897 *İstatistik Yıllığı*, p. 128.

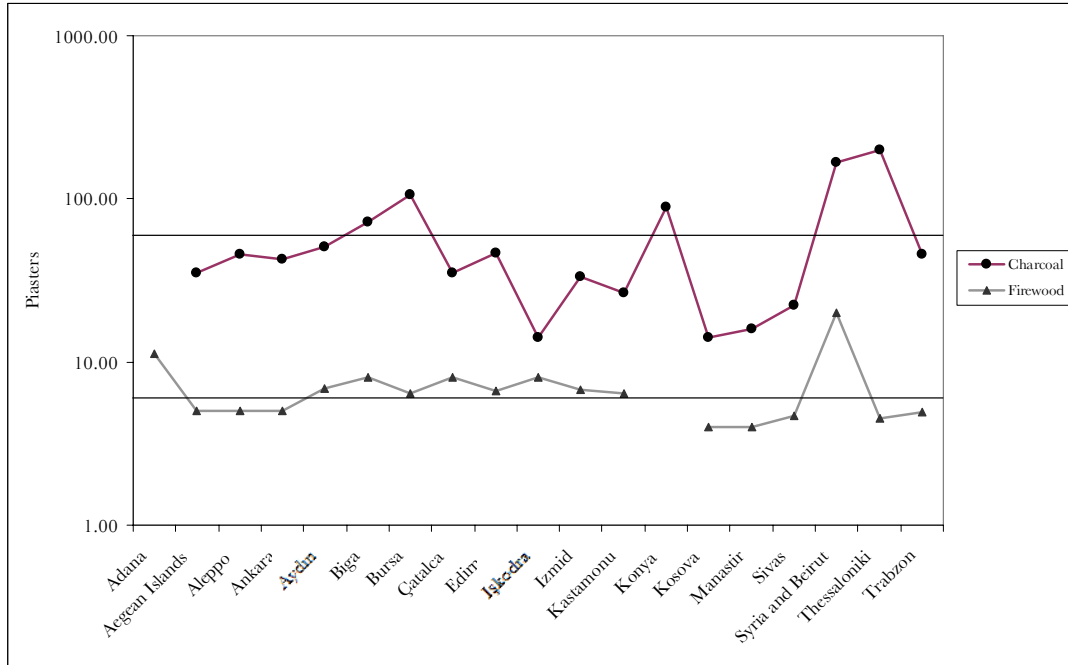


Figure 2: Prices of firewood and charcoal in the provinces, 1897.

The Ottoman government sought to control the selling of forest products especially in the places where exchange took place due to insufficient personnel. The local official, though were to control the fellings in *miri* forests as well, could only perform their functions in the markets, ports and railway stations, more often than not this system brought with itself many abuses of authority. There are numerous documents in the archives prohibiting of export of timber, firewood, charcoal and other forest products to Europe. These prohibitions especially increased when the belief that forests were depleting, thus the Shipyard could not find timber for shipbuilding became established within the authority. They also increased during the periods of intense ship constructions. Examples of such trade restrictions in forest products were generally challenged by local and foreign merchants. Such restrictive and prohibitive measures might have been a reason for government's concern for the protection of forests and the continuation of the self-sufficiency of Shipyard and Arsenal and provisioning of cities and towns.²⁶⁹

2.6. Rational Forest Management and Practices

The second half of the nineteenth century marked an important turning point in the history of global forestry. Almost all major states in the world initiated new agendas and practices of 'scientific forestry,' which was developed in the late 18th century (roughly from about 1760s) in Prussia.²⁷⁰ Meanwhile, the idea of the forest

²⁶⁹ BOA, *I. DH.* 33929 (4 C 1279/27 November 1862); BOA, *A. MKT. NZD.* 27/48 (15 R 1267/17 February 1851); HK, *Doc. No.* 183 (Et. Za 1268/26 Aug.-4 Sep. 1852); HK, *Doc. No.* 185 (Er. N 1270/17-26 June 1854); BOA, *HR. MKT.* 55/82 (15 R 1269/26 January 1853); BOA, *A. MKT. NZD.* 37/95 (27 Ş 1267/27 June 1851); BOA, *Y. EE.* 84/132 (23 Z 1296/8 December 1879).

²⁷⁰ There are two competing trends on the emergence of the ideas on scientific forestry: ecological and economic. Former is emanated from the work of Richard Grove, who has argued that the ideas on rational forest management were originated first in the colonies, not in Europe. He based this argument on the

as a source of income, was also developed by Enlightenment philosophers, mainly by Le Roy, in the *Encyclopédie* of Diderot and D'Alembert.²⁷¹ The 'cameral science' (*Kameralwissenschaft*) in Prussia elevated 'scientific forestry' to the highest level of the fiscal administration and resource management, which was considered to be a "science of state finances, while the proliferation of economic

eighteenth-century European scientists' findings between the deforestation of the French colony of Mauritius and British colonies in the Caribbean and declining rainfall. For him, these ideas then applied for the European forests. Richard Grove, "Colonial Conservation, Ecological Hegemony and Popular Resistance: Towards a Global Synthesis," in *Imperialism and the Natural World*, ed. J. M. MacKenzie (Manchester: Manchester University Press, 1990); Richard Grove, "The European East India Companies and Their Environmental Policies on St. Helena, Mauritius and in Western India, 1660-1854," *Comparative Studies in Society and History* 36 (1993); Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860*. In contrast to Grove, Lowood and Rajan has argued that scientific forestry (or silviculture) began not in the colonies but in Western Europe, especially in Germany and France towards the end of the eighteenth century, when concerns about mountain erosion and timber shortages motivated the French and German governments and scientists to find new methods to make forests and woodlands more productive on the basis of sustained yields. Rajan claims that the colonial methods of forestry were an integral part of the methods of scientific forestry that dominated German and French forestry science during the eighteenth and nineteenth centuries. Henry E. Lowood, "The Calculating Forester: Quantification, Cameral Science, and the Emergence of Scientific Forestry Management in Germany," in *The Quantifying Spirit in the Eighteenth Century*, ed. Tore Irängsmyr, J. L. Heilborn, and Robin E. Rider (Berkeley: University of California Press, 1990); Henry E. Lowood, *Patriotism, Profit, and the Promotion of Science in the German Enlightenment: The Economic and Scientific Societies, 1760-1815*, *Modern European History. Germany and Austria* (New York: Garland Pub., 1991); Rajan, "Imperial Environmentalism or Environmental Imperialism?." Contrary to this accounts, Vandergeest and Peluso, while examining the origins, spread, and practices of professional forestry in Southeast Asia, challenges the popular and scholarly accounts of colonial forestry as a set of simplifying practices exported from Europe and applied in the European colonies. They argue that "professional forestry empires were constituted under colonialism through local politics that were specific to particular colonies and technically uncolonised regions. Local economic and ecological conditions constrained the forms and practices of colonial forestry." Vandergeest and Peluso, "Empires of Forestry: Professional Forestry and State Power in Southeast Asia, Part 1."

²⁷¹ Ciancio and Nocentini, "Forest Management," p. 48; Robert Pogue Harrison, *Forests: The Shadow of Civilization* (Chicago: University of Chicago Press, 1992).

facts and figures raised issues of numeracy and appropriate training for office-holders charged with applying the principles of this new science.”²⁷² Such a quantification and rationalization became the backbone of the ‘economic rationalization’ that affected the resource management methods of the modern states. The major aim, then, was to devise a profit from the natural resources of the economy.

Lowood locates this development in the aftermath of the Seven Years’ War (1756-63), when the ‘specter of shortages’ of firewood caught the attention of some foresters and enlightened bureaucrats, who believed that the deterioration of woodlands increased following the devastation caused by the war. Moreover, he adds that the population growth and the expansion of industry and trade, encouraged by Frederick the Great, also put pressure on demand for wood and other forest products that the fear of crisis in the supply of wood further intensified.²⁷³ However, the arguments on the ‘wood scarcity’ as a cause of the development of scientific forestry in pre-industrial Germany has been recently questioned by some researchers after contrasting laws and descriptions with financial documents, maps and statistics. The findings displayed that ‘wood scarcity’ was a construction of the state authorities and it differed between region to region and between construction timber and firewood.²⁷⁴

Traditionally, deforestation was presented as a uniform phenomenon in all parts of the world throughout history. Later, researchers tended to correlate it with

²⁷² Lowood, “Calculating Forester,” p. 315.

²⁷³ *Ibid.*, p. 318.

²⁷⁴ C. Ernst, “How Professional Historians Can Play a Useful Role in the Study of an Interdisciplinary Forest History,” in *Methods and Approaches in Forest History*, ed. Mauro Agnoletti and S. Anderson (Wallingford-Oxon, UK and New York: CABI Pub. in association with the International Union of Forestry Research Organizations (IUFRO), 2000), p. 32. On the issue of wood scarcity in Germany, especially see: Radkau, “Wood and Forestry in German History: In Quest of an Environmental Approach.”

the rapid development of capitalism after the sixteenth century, which reached its peak during the industrial period. Against this reductionist idea, many historians revised the premises of traditional approaches and began to question the sources and rhetoric on wood scarcity at the beginning of the nineteenth century.²⁷⁵ It was common for the state agents to complain about the destructive mentality of local people before the establishment of a control over a specific resource, namely the forest. But starting with the 1850s, the scientific experts came to accuse the traditional resource use on economic grounds. The state's financial concerns, which directed the efforts to monopolize revenues from forests were legitimized this policy of central control by claiming that this policy would be more beneficial for the state and society simultaneously. Accordingly, the silviculture and *aménagement*, supported by organic laws to increase wood production and maximize profits, utilized to repudiate the local methods of extraction.²⁷⁶

The foundation of the first forestry schools signaled the establishment of a solid ground for the domination of forest science, *Forstwissenschaft* (in the Ottoman Empire 'orman fenni') in the management and regulation of forests.²⁷⁷ The forest science then gradually was imported by other states in the world. It became also one branch of the cameral sciences. As Scott aptly states, the

²⁷⁵ For a good example of a micro history, see: Bernd-Stefan Grewe, "Shortage of Wood?: Towards a New Approach in Forest History: The Palatinate in the 19th Century," in *Forest History: International Studies on Socio-Economic and Forest Ecosystem Change: Report No.2 of the IUFRO Task Force on Environmental Change*, ed. M. Agnoletti and S. Anderson, IUFRO Research Series 2 (Wallingford, Oxon [England] and New York, NY: CABI Publishing, 2000).

²⁷⁶ Ramachandra Guha and Madhav Gadgil, "State Forestry and Social Conflict in British India," *Past and Present*, no. 123 (1989); Nancy Lee Peluso, *Rich Forests, Poor People: Resource Control and Resistance in Java* (Berkeley: University of California Press, 1992); Sivaramakrishnan, *Modern Forests*.

²⁷⁷ Lowood, "Calculating Forester."

emergence of scientific forestry cannot be adequately understood without the consideration of the centralized statemaking context of the same period.²⁷⁸

The invention of scientific forestry in the late 18th century was closely related with the process of state simplifications, which Scott categorized as the ‘tunnel vision’ of state. By simplifying a “far more complex and unwieldy reality,” he claims, the state made it more ‘legible’ for better control and management. Scott utilized the history of scientific forestry as a metaphor for the “forms of knowledge and manipulation characteristic of powerful institutions with sharply defined interests, of which state bureaucracies and large commercial firms are perhaps the outstanding examples.”²⁷⁹ For him, there was a fundamental agreement between the motives of state’s scientific forestry and commercial drives of firms to exploit forests. However, he distinguishes the longer and broader outlook of the state from that of the private firms, which “plundered old-growth forests and then sold their acreage or surrendered it for back taxes.” But yet, he adds that the state could also drift to this shortsighted view of the commercial firms in cases of war or fiscal crisis.²⁸⁰

Nonetheless, there were some practical limits to the ‘tunnel vision’ of the state, as put by the author. First, the state overlooked the multiple and practical uses of each species of tree and its parts because of its fiscal concerns. Thus, he argues that “[i]n ... fiscal forestry, ... the actual tree with its vast number of possible uses was replaced by an abstract tree representing a volume of lumber and firewood.”²⁸¹ Second, the state’s scientific vision ignored many characteristics of the biota of a

²⁷⁸ Scott, *Seeing Like a State*, p. 14.

²⁷⁹ *Ibid.*, p. 11. The account he makes here is largely based on: Lowood, “Calculating Forester,” pp. 315-342.

²⁸⁰ Scott, *Seeing Like a State*, p. 15fn12.

²⁸¹ *Ibid.*, p. 11.

forest as well as local practices that challenged the state's scientific policies.²⁸² And third, the 'tunnel vision' of state infringed on the human-forest interaction and sought to monopolize the "vast, complex, and negotiated social uses of the forest."²⁸³ However, it must be stated that Scott neglects the overall multiple levels of change in this process. In effect, nothing became transformed immediately, but instead both state and society experienced and accomplished a forest policy through trial-and-error, as will be seen in the Ottoman case.

Following the further institutionalization of the scientific forestry, two main opposing theories on rational forest management emerged in Germany in the second half of the nineteenth century: the land rent theory (*Bodenreinertragslehre*) and the theory of the highest revenue (*Waldreinertragslehre*). The former had its roots in the 1820s, when Friedrich Wilhelm Leopold Pfeil claimed that the aim of forestry was to obtain the highest land rent, instead of producing the greatest usable amount of wood, by utilizing an interest on the capital investment.²⁸⁴ The proponents of this theory gave it a sounder basis and later evaluated forest land as a source of permanent periodic income from forest products. In 1871, Gustav Heyer launched the concept of 'forest statics' (*forstlichen Statik*) to evaluate the equilibrium between the expenditure and revenue from forests. The method was implemented to determine the feasibility of forestry.²⁸⁵ Mainly, the land rent theory echoed the 'homo oeconomicus' in forestry from the viewpoint of a liberal market

²⁸² Ibid. Referring to his communication with Ramachandra Guha, Scott acknowledges that even the verb 'ignore' is inadequate here.

²⁸³ Ibid., p. 12.

²⁸⁴ Unless otherwise acknowledged, the discussion on "the land rent theory" and "the theory of the highest revenue" draws on: Bernard Möhring, "The German Struggle between the '*Bodenreinertragslehre*' (Land Rent Theory) and '*Waldreinertragslehre*' (Theory of the Highest Revenue) Belongs to the Past—but What Is Left?," *Forest Policy and Economics* 2 (2001).

²⁸⁵ It seems that the Ottoman forest statistics are generally utilized this method. They will be analyzed in Chapter 5.

economy.²⁸⁶ To put another way, the ‘land rent theory’ was a kind of rejoinder to the ‘theory of rent’ as developed by Adam Smith in the *Wealth of Nations*.²⁸⁷

The application of the land rent theory in the forest conflicted with the principle of sustained yield, which had become one of the central ideas of German forestry.²⁸⁸ The term ‘sustained yield’ was first formulated in Prussia in 1767 and consequently became the ‘conceptual cornerstone’ of modern scientific forestry in the nineteenth century.²⁸⁹ According to this principle a well-arranged management of forests would increase the durability, and thus annual yield and income. The land rent theory conflicted with the principle of sustained yield because of the reduction in stand density and rotation age. Some argued that the main task of the forestry profession was to maintain the sustainability of forest and not to destroy or reduce it.²⁹⁰ Followingly, the so-called ‘theory of highest revenue’ was developed against the ‘land rent theory’ and quickly found avid proponents among scientific foresters. According to this concept, the forests had to be managed for the highest surplus, which advocated for a sustainable management of existing forest stands, without taking any interest into account. The advocates also criticized the land rent theory for its stress on the utility of wood production only, in which other utilities of

²⁸⁶ Möhring, “German Struggle between the ‘Bodenreinertragslehre’ (Land Rent Theory) and ‘Waldreinertragslehre’ (Theory of the Highest Revenue),” p. 197.

²⁸⁷ Adam Smith, *The Wealth of Nations. Books I-III*, ed. with an introduction and notes by Andrew Skinner (London and New York: Penguin, 1999 [1776]), pp. 247-79.

²⁸⁸ The others central ideas were the principles of minimum diversity and balanced supply and demand (or balance sheet). These three principles were common to all varieties of rational forest management that were affected by the German case. Lowood, “Calculating Forester.” Also see: Scott, *Seeing Like a State*, p. 15. Rajan, “Imperial Environmentalism or Environmental Imperialism?”

²⁸⁹ Henry Lowood, “Forestry,” in *The Oxford Companion to the History of Modern Science*, ed. J. L. Heilbron (Oxford: Oxford University Press, School of Oriental and African Studies, 2003).

²⁹⁰ Cited in: Möhring, “German Struggle between the ‘Bodenreinertragslehre’ (Land Rent Theory) and ‘Waldreinertragslehre’ (Theory of the Highest Revenue),” p. 197.

forests such as nature conservation, watershed protection, recreation, soil erosion were not considered. The words of the head of the Prussian State Forest Administration, Otto Hagen, in 1867 summarized the core of this principle of highest revenue in line with the utilitarian philosophy of his time:

The Prussian State Forest Administration does not adhere to the principle of obtaining the highest financial returns. In contrast to private forest enterprises, it feels obligated to manage its forests to maintain an equal flow of multiple products for general welfare and future generations.²⁹¹

Despite his focus on public benefit of forests as opposed to the financial objectives of the land rent theory, Hagen probably well knew that during this period, the scientific forestry usually went hand in hand with the economic and financial interests of modern states. The late nineteenth and twentieth centuries' distinction of 'forest as an economic resource' and 'forest as an ecosystem' was only in the making. It seems that the forest management practices guided with sustained yield principle in the nineteenth century had tacit economic and financial objectives in practice.

The development of scientific forestry did not follow the same path in every part of the world. We need to define different types of forestries in diverse historical places and contexts. However, in keeping apace with this proposition, we are to acknowledge that actors and groups, factors and conditions interchangeably play strategic roles in the evolution of global scientific forestry. The continental scientific forestry was not uniform everywhere. The practices and policies varied throughout Europe and her colonies. A brief summary of different experiences and agendas of scientific forestry will be helpful to understand the Ottoman involvement in this universal process.

²⁹¹ Quoted in: *Ibid.*, p. 198.

Great Britain

Inspired by German practices, Great Britain initiated a forestry policy in her colonies after 1856, when a 'rational' forest management system originated in Burma with the appointment of Dietrich Brandis (1824-1907), a German botanist, as the superintendent of teak forests in Pegu. Seven years later, he became the Inspector-General of Forests of India. After his extensive surveys in Indian forests, the British government in India was convinced that a state control was necessary to prevent the forests from destruction by local people and private interests.²⁹² Following him, William Schlich, who succeeded Brandis in 1881, clarified the major objective of the Indian Forest Department as follows:

History has proved that the preservation of an appropriate percentage of the area as forests cannot be left to private enterprise in India, so that forest conservancy in that country has for some time past been regarded the duty of the State.²⁹³

This objective refers to the activities of East India Company, which controlled and manipulated timber trade in India's forests before the British gained a foothold in India.

India remained to be a 'laboratory' and a 'model' for Great Britain in her forestry policies until after the 1920s.²⁹⁴ In 1920, these policies were called 'empire

²⁹² For Brandis's experience in India, see: Raymond L. Bryant, "Rationalizing Forest Use in British Burma 1856-1942," in *In Nature and the Orient: The Environmental History of South and Southeast Asia*, ed. Richard H. Grove, Vinita Damodaran, and Satpal Sangwan (Delhi: Oxford University Press, 1998), pp. 826-834; Rajan, "Imperial Environmentalism or Environmental Imperialism?," pp. 343-347; Donald M. Schug, "The Bureaucratisation of Forest Management in India," *Environment and History* 6 (2000).

²⁹³ William Schlich, *A Manual of Forestry*, 3 vols., vol. 1 (Oxford: 1889), p. 95. Quoted in: Rajan, "Imperial Environmentalism or Environmental Imperialism?," p. 351.

²⁹⁴ Greg Barton, *Empire Forestry and the Origins of Environmentalism*, Cambridge Studies in Historical Geography 34 (Cambridge, U.K. and New York:

forestry' that had strong roots in the Continental tradition, which followed the footsteps of Brandis, Schlich, and other foresters. Barton claims that 'empire forestry' resolved the nineteenth century tension between "romantic preservationist notions and laissez-faire policies" and adds that due to the Empire's forestry policies, public opinion in Great Britain where *laissez-faire* capitalism dominated much of economic and political life learned to welcome the idea of public ownership of land, assisted also with the help of devoted governmental professional foresters and some intellectuals.²⁹⁵

France

On the other hand, France had long been engaging with her forests since the introduction of the Forest Ordinance of 1669 that regulated local customs and rights and established a central administration to supply timber for the navy. After the French Revolution, forest and water administrations were combined into one institution and from that time onwards this 'effective' institution ventured against the customary uses of natural resources in the countryside.²⁹⁶ Different than the other Continental forestry regimes, the reckoning of this administrative and, also technical, collaboration of forest and water administrations made France probably the most successful practitioner of scientific forestry in the nineteenth century. In the 1820s, she emerged also as an important center for forestry education with a cadre of German-trained professional foresters. The French Forest School at Nancy,

Cambridge University Press, 2002), p. 125. Rajan, "Imperial Environmentalism or Environmental Imperialism?."

²⁹⁵ Barton, *Empire Forestry and the Origins of Environmentalism*, p. 125-26.

²⁹⁶ See: Peter Sahlins, *Forest Rites: The War of the Demoiselles in Nineteenth-Century France* (Cambridge, Mass.: Harvard University Press, 1994); Tamara L. White, *Forests and Peasant Politics in Modern France* (New Haven: Yale University Press, 2000).

founded by B. Lorentz in 1827, and developed by his successor, A. Parade, became one of the foremost centers of forestry research and practice throughout the whole world.²⁹⁷

The most important success of the French forest management was the reforestation of Alpine mountains and sand dunes along the coasts, which prevented soil erosion, alluvion, and annual floods and additionally produced more commercial forest resources.²⁹⁸ French forestry was also famous in the 19th century for its success in building a developed central forest administration. French forestry practice included “the definition of the rights of users, building roads and structures, replanting, financial planning, grazing, hunting, and the administration of penalties for offenses.”²⁹⁹ If we also take into consideration the French cultural and political influences in the Ottoman Empire and the similarity of problems experienced, it seems that the highly centralized forestry in France appeared to be a better alternative for the Sublime Porte than the colonial forestry of the British and the German forestry of the pre-Bismarckian era. Through the French model, also, the Ottoman Empire imported utilitarian and early conservationist principles into the field of forestry.

²⁹⁷ Rajan, “Imperial Environmentalism or Environmental Imperialism?,” pp. 338-40; Whited, *Forests and Peasant Politics*, pp. 28-33.

²⁹⁸ Gifford Pinchot, *A Primer of Forestry. Part II: Practical Forestry* (Forester, Bulletin 24 (1905). Bureau of Forestry, U.S. Dept. of Agriculture, accessed June 2006. www.sfws.auburn.edu/sfnmc/class/pinchot.html). For a very good discussion of the environmental and political history of the disputes over the uses of forests and mountains in France between mid-nineteenth and mid-twentieth centuries, see: Whited, *Forests and Peasant Politics*.

²⁹⁹ Barton, *Empire Forestry*, pp. 13-14.

Sweden

Besides the state-dominated forestry in Germany, France, and Great Britain, there was also the Swedish example in Europe. The forest management in Sweden became finalized as a mixture of ‘state intervention’ and ‘private cooperation’ in the late 19th and early 20th centuries, which was, as Williams suggests, neither a laissez-faire capitalism nor a centralized state planning, but a ‘negotiated order’ of exploitation.³⁰⁰ When the British government lowered the import tariffs on Swedish timber in 1840, the private companies, both national and foreign, galloped to exploit the old-growth forests, reaching to the northern regions around the 1870s.³⁰¹ This was also a period, when the demand for Swedish timber by the industrialized countries of Western Europe increased.³⁰² Sweden had gradually reached a ‘stalemate’ in the late nineteenth and early twentieth centuries, when the Swedish government intervened to regulate the purchases of rural land and common forests by timber companies to protect the rights of rural private forest owners. However, after a short while, this objective of the Swedish government changed drastically and it tried to encourage private owners to engage with commercial forestry. Henceforth, the forest policies of Sweden has been shaped through the concept of ‘public direction of private forestry.’³⁰³

³⁰⁰ Williams, *Deforesting the Earth*, p. 416. The term ‘negotiated order’ is cited in: Per Stjernquist, *Law in the Forests: A Study of Public Direction of Private Forestry*, Acta Societatis Humanorum Literarum Lundensis, No. 69 (Lund: C. W. K. Gleerup, 1973), p. 69.

³⁰¹ Williams, *Deforesting the Earth*, p. 417.

³⁰² J. Björklund, “From the Gulf of Bothnia to the White Sea - Swedish Direct Investments in the Sawmill Industry of Tsarist Russia,” *Scandinavian Economic History Review* 32 (1984). Cited in: L. Östlund and O. Zackrisson, “The History of Boreal Sweden: A Multidisciplinary Approach,” in *Methods and Approaches in Forest History*, ed. M. Agnoletti and S. Anderson, IUFRO Research Series 3 (Wallingford-Oxon, UK and New York: CABI Pub. in association with the International Union of Forestry Research Organizations (IUFRO), 2000), p. 121.

³⁰³ Williams, *Deforesting the Earth*, p. 417.

2.7. Pillars of Modern Forestry: Utilitarianism and Conservationism

The dominant Western perspectives of human nature relations in the nineteenth century included utilitarianism and conservationism.³⁰⁴ Realism, romanticism, and liberalism were other perspectives that also involved with human nature relations. Utilitarian theories of the late eighteenth and early nineteenth centuries coincided with the rise of modern capitalist state in the West. One may claim that monotheistic religions' understanding of nature-human relations do have a certain gist of utilitarian thought.³⁰⁵ Nonetheless, any further argument on the utilitarianist principles of Islam and Christianity needs further grounding, thus will not be dealt with here any further.

The perspectives on the human-nature relationships have also close interconnections with the wider political and economic order. The development of forestry in the Ottoman lands throughout the nineteenth century can be analyzed through the concepts of utilitarianism and conservationism, with some reservations. The easiest way to picture them is to look at the developments and practices in forestry. Before describing these developments and practices, it is necessary to clarify the concepts of utilitarianism and conservationism, and how these concepts are applied to practices in Ottoman forestry.

³⁰⁴ For a brief and well-defined explanations of these concepts, see: Eric Laferrière and Peter J. Stoett, *International Relations Theory and Ecological Thought: Towards a Synthesis* (London and New York: Routledge, 1999), pp. 22-40.

³⁰⁵ For a brief discussion of the Islamic teachings on environmental protection, see: E. Kula, "Islam and Environmental Conservation," *Environmental Conservation* 28, no. 1 (2001). The concepts of 'himâ' and 'haram' (literally meaning 'protected and forbidden places') in Islamic teaching, which dates back to the pre-Islamic Arabia, centered on the idea of protecting the biota of a certain region, including woodlands, for the benefit of the herds of the nomadic chieftains as grazing grounds. "Himâ," *Encyclopedia of Islam*.

2.7.1. Utilitarianism

In the broadest definition of utilitarianism, the nature is seen as “use value, as capital, to be properly managed –through innovative engineering and judicious use of scientific research in various fields.”³⁰⁶ Scott claims that the utilitarian outlook the state applied to forest was a kind of abstraction; an abstraction that was applied to the ‘observed’ reality; an abstraction that exemplified the ‘tunnel vision’ of the state. Thus, according to Scott, the utilitarian discourse

[r]eplaces the term ‘nature’ with the term ‘natural resources,’ focusing on those aspects of nature that can be appropriated for human use. A comparable logic extracts from a more generalized natural world those flora and fauna that are of utilitarian value (usually marketable commodities) and, in turn, reclassifies those species that compete with, prey on, or otherwise diminish the yields of the valued species. Thus, plants that are valued become ‘crops,’ the species that compete with them are stigmatized as ‘weeds,’ and the insects that ingest them are stigmatized as ‘pests.’ Thus, trees that are valued become ‘timber,’ while species that compete with them become ‘trash’ trees or ‘underbrush.’ The same logic applies to fauna. Highly valued animals become ‘game’ or ‘livestock,’ while those animals that compete with or prey upon them become ‘predators’ or ‘varmints.’³⁰⁷

After this ‘commodification’ of resources and ascribing them a ‘use value,’ the utilitarian outlook was then used to justify the use of natural resources for satisfying human needs. The concept of ‘use value’ can also be called as ‘utility’, which became backbone of utilitarianist theories since Jeremy Bentham (1748-1832). According to Bentham, the acid test of the moral and civil codes, and of the governmental prudence was the ‘principle of utility’, meaning “the maximization of the sum of the happiness of the individuals that make up of a society.”³⁰⁸

³⁰⁶ Laferrière and Stoett, *International Relations Theory*, p. 26.

³⁰⁷ Scott, *Seeing Like a State*, p. 13.

³⁰⁸ Roger E. Backhouse, *The Penguin History of Economics* (London and New York: Penguin Books, 2002), p. 140.

Contrary to the liberal views of the period, some utilitarians like John Stuart Mill and Edwin Chadwick, defended governmental intervention to fulfill “the greatest happiness of the greatest numbers.”³⁰⁹ In the field of scientific forestry, the debate between the utilitarian outlook and an ‘anti-utilitarian’ and ‘anti-Manchester School’ of thought also unfolded in Germany during the first half of the nineteenth century. But in the short-run the utilitarian perspective won the debate and thus it was reproduced in several countries, which imitated the German scientific forestry.³¹⁰ Utilitarianism and conservationism converged. The former affected the formulation of the latter.

2.7.2. Conservationism

As a body of thought, ‘conservationism’ arose in the second half of the nineteenth century, especially in the United States. In a nutshell, it reflected a concern for the negative impacts of economic development and industrial progress over nature, as it is reflected in the works of George Perkins Marsh (1801-1882) and Henry David Thoreau (1817-1862).³¹¹ Although Marsh, who acted as the United States ambassador to the Ottoman Empire and Italy in the 1860s, first introduced this concept in his *Man and Nature* (1864), it became a part of US governmental practices only after the establishment of the US Forest service in 1905. The first Chief of the Forest Service, Gifford Pinchot, summarized the mission of the Service essentially by a utilitarian standpoint: “To provide the

³⁰⁹ John Stuart Mill, “Utilitarianism,” in *Utilitarianism and Other Essays*, ed. Alan Ryan (London and New York: Penguin Books, 1897 [c. 1861]).

³¹⁰ Scott, *Seeing Like a State*, p. 19fn19.

³¹¹ George Perkins Marsh, *Man and Nature*, ed. David Lowenthal (Cambridge: Belknap Press of Harvard University Press, 1965); Henry David Thoreau, *Walden; or, Life in the Woods* (London: Oxford University Press, 1906).

greatest amount of good for the greatest amount of people in the long run.”³¹² Following this development, conservationism turned into a basic attitude of governmental reaction against the exhaustion of forests. It advocated for limited consumption of natural resources, in order not to diminish the ‘carrying capacity’ of nature.³¹³

Besides this radical reaction towards the depletion of forests, some other factors of the conservationist thought, which suits to the nineteenth and early twentieth centuries of the Ottoman context is presented below:

- an emphasis on the scientific and rational natural resource use, wherein scientific language is used occasionally to challenge customary practices;
- a confidence for legislation and regulation for an effective forest management;
- a stress on the ‘carrying capacity’ of forests;
- a belief in the durable management of forest resources, though the contradictions of this aim were seldom acknowledged;
- a reliance to the sustained yield principle in the absence of a systematic reforestation policy;
- a combination of practices of exploitation, allocation, and protection of forest resources.

The Ottoman forestry policies after the 1860s were a mixture of some of these utilitarian and conservationist factors in the abstract sense. The government began to react to the existing types of local resource use in the second half of the nineteenth century and argued for a rational forest management that would provide benefits both to the state and local population. The Ottoman official discourse

³¹² The quotation is from the web site of US Department of Agriculture Forest Service: www.fs.fed.us/aboutus/

³¹³ For more details, see: Laferrière and Stoett, *International Relations Theory*, pp. 32-40.

claimed that the material and moral uses and good virtues of forests were universally recognized facts that all the major nations and governments in the world accepted. Thus, it is inferred, the Ottoman government was to also consider these axioms and adopt and follow the rules and regulations and principles of scientific forestry concerning the protection and prosperity of forests to produce wealth.³¹⁴ These official objectives also heralded the codification of forest rules and regulations.

This version of utilitarianism did suit best to the Ottoman management of its natural resources in the nineteenth century. That is to say, the revenue-bearing and protective objectives of the state maintained together throughout the nineteenth-century forestry in the Ottoman Empire, though the income-producing aims outbalanced periodically, especially at times of financial crisis.

2.8. Conclusion

By the end of eighteenth century, Ottoman Empire's attitude toward free trade and its wider implications became especially important for European countries, because of their expansionist policies. Timber was a crucial product as other importing and exporting goods for Ottoman Empire. The Ottoman government who favors imports over exports had a wretched policy on export with bans. The government, also, could not control the import and export trade in the same way in all of its land because of the geographical and political conditions. Though the capitulations granted to England and France were renewed at the beginning of the nineteenth century, there was no noteworthy change regarding the exportation of forest products. In general, the forest products took little room when compared with other merchandize during the first half of the nineteenth century.

³¹⁴ BOA, *I. DH. 33929*.

By the change in the Ottoman provisionist and restrictive-prohibitive policies during 1860s, Ottoman government had liberal attitude to free trade with some resistant concerns of bureaucracy. The major aim of the government emerged as an increase in revenues instead of a reduction of expenditures. Forest resources had appeared to be one important source to increase revenues of the treasury. Although the planned reform for farming out the mines and forests was welcomed in Europe, it also aroused suspicion as to the amount revenue resulting from it. European countries that bring the sources of wealth from their colonies lost interest in Ottoman forests and began to exploit the forests according to the principles of 'rational', or scientific, forest management. By the end of nineteenth century, despite the liberalization of trade and the Ottoman inclination toward marketization of forest resources, the state could not provide sufficient timber to meet neither domestic nor foreign demand and became a net importer. During the nineteenth century trade in non-timber forest products was more important than timber exports.

The second half of the nineteenth century marked an important turning point in the history of global forestry. As all major states did, Ottoman state initiated practices of 'scientific forestry' with some reservations during the second half of the nineteenth century. The emergence of scientific forestry can only be understood with an eye on the statemaking in the nineteenth century. Although the development of scientific forestry did not follow the same path in every country, Ottoman Empire through the French model imported utilitarian and early conservationist principles into the field of forestry.

CHAPTER 3

INSTITUTIONS AND INSTITUTIONAL CHANGE IN FORESTRY

3.1. Introduction

One of the major aim of the Tanzimat reforms was the increase of the revenues of the state. The irregular taxation of forest products seemed to be a fundamental problem. The reforms on forest taxation in the 1840s failed. The problems that the Ottoman Empire faced during the early development of forestry policies, especially the state's endeavor to develop a 'rational' forest administration, were forerunners of scientific forestry policies after the Crimean War. These problems were related to issues such as the institutionalization of Ottoman forestry, the lack of a sufficient number of professional foresters, the budgetary disequilibrium, the problems of provincial forests, the lack of information on the condition of empire's forests and the like. Although we cannot talk of an Ottoman capitalism in the European sense, it is obvious that the Ottoman state had become integrated into world capitalism sometimes by mimicking the institutions with slight adjustments and sometimes by applying new institutional solutions to existing institutions. All these came about especially during the Tanzimat era in the nineteenth century. In this chapter the governmental policies for establishing a feasible forest administration, before the hasty codification process in the 1870s, will be presented.

Ottoman control over forests accelerated with the onset of rapid changes in the Ottoman Empire after the Crimean War. Especially after the 1860s, forestry was

the most distinctive field where specialized knowledge entered into the Ottoman Empire, preceding maybe only by the military field since the late eighteenth century.

The outdated working methods of mines and inefficient taxation of forest products in general were considered to be the major obstacles to the flourishing of the mining and forestry in the Ottoman Empire.

Archival documents pertaining to forestry, issued until the early 1860s, are focused mainly on the problems of taxation. From these documents, we see that the Tanzimat state saw the forests as an important source of state revenue. Perhaps owing to the difficulties to impose on households' consumption, the government preferred to tax only commercialized forest products.

The Council of Navy had been established on 25 January 1840 to regulate all naval affairs. The complexity in the delegation of power confused every agent, including local officials. The administrative boundaries were so blurred that decisions often remained on paper. The Imperial Shipyard, for example, opposed new ideas as they threatened its resource base. The institutional experiments in this period shows that there were fundamental problems about forestry. This and subsequent disorganizations in the provisioning of timber for the shipbuilding forced the Council to revise the traditional and time-consuming methods.

It was only during the second half of the nineteenth century that the Ottoman government designed new and compact models to render forests more productive. For the Ottoman administration, controlling and regulating forest exploitation needed legal restrictions. To establish a legal framework, the government invited European specialists to take responsibilities in the Council and its affairs. The Council of Public Works with its foreign advisers was responsible for managing forests as well. The Council of Public Works with its foreign advisers was responsible for managing forests as well. Through this council, the central government aimed at taking full control of traditional ways of managing natural

resources. As already mentioned, it were the French experts who set up the first forestry school and who undertook the first scientifically reliable forest survey within the Ottoman Empire. For the supervision and exploitation of forests, a new administration based on utilitarian principles was needed. The forest administration was just that utilitarian administrative system, in which strict attention to rules and procedures was mandatory.

3.2. Tanzimat and the Organization of Forestry

The Edict of Tanzimat (1839) brought about many new regulations on taxation matters. It abolished tax farming, which was reinstated again in 1842. Except for the *aşar* (tithe), the *cizye* (head tax on non-Muslims), and the *ağnam resmi* (sheep and cattle tax), the Edict also abrogated other customary taxes, and aimed to institute a general fixed tax, called *ancemaatin virgü*.³¹⁵ The aim of these decisions was to introduce proportional taxation to increase the revenues of the Ottoman state. This objective, in fact, could not be applied regularly until the commencement of the *temettu'at* (revenues) surveys, which registered and classified property throughout the empire, in 1844-45.³¹⁶ At the same time, the

³¹⁵ However, the government sought to rearrange the *cizye* and *ağnam* taxes. Kaynar, *Mustafa Reşit Paşa ve Tanzimat*, pp. 258-63; Stanford J. Shaw and Ezel Kural Shaw, *History of the Ottoman Empire and Modern Turkey* (Cambridge and New York: Cambridge University Press, 1976), p. 84; Abdüllatif Şener, *Tanzimat Dönemi Osmanlı Vergi Sistemi* (İstanbul: İşaret, 1990), pp. 1-2. For the fiscal reforms of the 1840s, see: Çakır, *Osmanlı Maliyesi*; Şener, *Osmanlı Vergi Sistemi*.

³¹⁶ Tefvik Güran, *19. Yüzyılda Osmanlı Tarımı* (İstanbul: Eren, 1998); Mübahat Kütükoğlu, "Osmanlı Sosyal ve İktisadi Kaynaklarından Temettu Defterleri," *Belleten* 59, no. 225 (1995). For a political and administrative analysis of these surveys, see: Huri Islamoğlu, "Politics of Administering Property: Law and Statistics in the Nineteenth-Century Ottoman Empire," in *Constituting Modernity: Private Property in the East and West*, ed. Huri Islamoğlu (New York: I.B.Tauris, 2004); Alp Yücel Kaya, "Politique de l'enregistrement de la richesse économique: les enquêtes fiscales et agricoles de l'empire Ottoman et de la France au milieu du

government attempted to centralize the collection of taxes by sending *muhassıls* (tax collectors), granted with extraordinary powers, to each province in 1840. Apart from the collection of *aşar* (tithe), the government warranted these *muhassıls* to discipline the local powerholders, notables as well as government officials, who extracted many haphazard fees and taxes from the population in the name of central treasury.³¹⁷ However, the new system proved inefficient and inoperative after about one year due to administrative and economic conflicts at provincial level and corruption of the *muhassıls*.³¹⁸

Meanwhile, the government also set out to regulate the forest taxes. The irregular taxation of forest products seemed to be a fundamental problem. Although many profits were expected, the reforms on forest taxation in the 1840s remained symbolic, because almost none of the major problems were touched upon. As a part of the new reformist measures, the central government resorted to deal with the forest question around mid-1840. On 12 July, the Sublime Council of Judicial Ordinances (*Meclis-i Vala-yı Ahkam-ı Adliye*) decided that the Ministry of Trade (Ahmed Fethi Paşa was the minister then) was to be responsible of the administration of the state (*miri*) and crown forests (*koru-yı hümayun*). Despite the attachment of the *miri* forests under the jurisdiction of the Ministry of Trade, the

XIX^e siècle” (Unpublished PhD thesis, EHESS, Paris, 2005), pp. 315-330 and 375-415.

³¹⁷ Şener, *Osmanlı Vergi Sistemi*, pp. 36-41. Çakır, *Osmanlı Maliyesi*, pp. 42-47.

³¹⁸ On the *muhassılık* system, see especially: Musa Çadircı, *Tanzimat Döneminde Anadolu Kentleri'nin Sosyal ve Ekonomik Yapısı* (Ankara: Türk Tarih Kurumu, 1997), pp. 208-18; Çakır, *Osmanlı Maliyesi*, pp. 105-18; İlber Ortaylı, *Tanzimat Devrinde Osmanlı Mahallî İdareleri (1840-1880)* (Ankara: Türk Tarih Kurumu, 2000), pp. 32-40; Stanford J. Shaw, “Local Administrations in the Tanzimat,” in *150. Yılında Tanzimat* (Ankara: Türk Tarih Kurumu, 1992), pp. 33-49; Şener, *Osmanlı Vergi Sistemi*, pp. 36-65. For archival documentation of these conflicts among local landowners, governors, and tax collectors, see: Selçuk Dursun, “Population Policies of the Ottoman State in the Tanzimat Era: 1840-1870” (M.A. Thesis, Sabancı University, February 2001), pp. 11-12, footnotes 26 and 27.

inclusion of crown forests was crucial for the moment because the Palace became ineffective in monitoring due to the irresolution of local officials about their administration and management.³¹⁹

The supervision of the provincial crown forests traditionally belonged to the senior officers from the Imperial Chancery (*hacegan-ı Divan-ı Hümayun*) and the veteran soldiers. They also acted as the *muhassıls* (tax collectors) and administrators on behalf of the Sultan. The following example displays the default of palace agents in the provinces. One of the *hacegans* from Taşköprü (Kastamonu) complained the Ministry of Finances, Sa‘ip Paşa, that the inhabitants were cutting trees without taking any official permit from him. Sa‘ip Pasha responded that if the Sublime Council issued a decree refuting such unofficial cuttings from forests in Taşköprü, he would send it to the local *muhassıl* Asım Bey as soon as possible. The Sublime Council, however, proclaimed during the meeting of 12 July 1840, that both the state and crown forests would be under the jurisdiction of the Minister of Trade, Ahmed Fethi Paşa, thus the local officials would communicate with him for the affairs of forests. Although the compilation of rules and regulations was continuing at the moment, the Sublime Council declared unauthorized cuttings at *miri* forests were harmful to the public (*miri*) treasury and were to be considered as a transgression. The Council presented two alternatives to resolve the problem. In the first option, the cutting and transportation fees would be compensated by making payments to the local inhabitants both for the timber carried to the port of Şile (Istanbul) and those left within the forest, and confiscate all the timber on behalf of the central treasury to sell them to clients. Second, the local council of administration would consult the local experts (*erbab-ı vukuf*) on the standing value of the timber prior to cutting and demand the amount from the loggers. Since there were still no settled rules, the Sublime Council formulated its solutions on the basis of the notion of ‘justifying cause’ (*mesağ-ı şer‘i*). The Sublime Council also

³¹⁹ HK, *Doc. Nos. 158-159-160-161* (19 Ca 1256/19 July 1840).

decided that provincial officials were to instruct local inhabitants that the government would no longer allow felling trees from 'state mountains' (*cibal-i miriyye*). The final imperial decree was issued one week later, approving all the decisions of the Sublime Council.³²⁰ Though it is not clear which of the two alternative solutions was approved, it seems that the decisions of the Council resolved this specific problem temporarily. Most probably, the first solution was applied because of a possible resistance to the second alternative by the peasants. Whatever the decision, the incident alone displays that the state did not yet have a universal procedure to deal with an ordinary case, which could well be seen in every region of the Empire.

The wish to reorganize forestry paralleled also with the regulation of mining industry. The local administrative officials and tax farmers, responsible from the working of mines and management of forests, hindered the flow of revenues to the capital. The methods for extraction and the techniques for the mining and smelting of mines were also outdated. The costs of working and transportation as well as fuel surpassed usually the profit that the government made from mines. Compared to the furnaces in Europe, the Ottoman furnaces were very small and thus the losses during the smelting process were considerably high. The Mines Administration was attached to the Ministry of Finances, whereas General Directorate of Forests was attached to the Ministry of Trade.³²¹

The Directorate of Forests was to supervise the application of the new rules and regulations on forests. Though the institution did not seem to have its own governing statute, we are informed through a writ of the Grand Vizier that an imperial order (*irade-i seniyye*) was issued containing rules and regulations on forests, and the General Directorate was to be responsible for executing these

³²⁰ Ibid.

³²¹ *Haus-Hof und Staatsarchiv (HHS) Türkei VI-66*, January 1837. Published in: Issawi, *Economic History of Turkey*, pp. 283-86.

rules.³²² However, it has been impossible to locate a regulation specifying these rules and regulations. Still, one may reconstruct some parts of this unknown regulation on the basis of subsequent documents and applications. Suffice it to say that, at this juncture, the Ottoman administration did not yet base these rules on the principles of modern forest management.

3.2.1. First General Directorate of Forests

The central government announced the establishment of the first General Directorate of Forests (*Orman Müdüriyyet-i Umumiyyesi*) in August 1840.³²³ The first General Director of Forests was Ahmed Şükrü Bey (d. 1877), appointed through the proposal of Ahmed Fethi Paşa to the Grand Vizier. In his statement to Rauf Paşa written in mid-August 1840, the minister recommended him as an intelligent and experienced person. Ahmed Şükrü's previous position was of the General Director of the Imperial Armory (*Tüfenkhane-i Amire Müdürü*). He used to be also a senior officer in the Imperial Chancery (*hacegan-ı Divan-ı Hümayun*), who might have been in charge of the supervision of crown forests in the past.³²⁴ This directorate was the first civil body specialized in the administration of forests.

³²² BOA, *I. DH. 902* (19 C 1256/18 August 1840).

³²³ *Ibid.*

³²⁴ On 18 August 1840, the government officially appointed him to start office on 29 August 1840 (1 B 1256) with a monthly salary of 4000 *guruş*, which was quite high for the period. *Ibid.* About three weeks later, he became the Minister of Postal Service as well, while holding the General Directorship of Forests. BOA, *I. DH. 978* (12 B 1256/9 September 1840). It is difficult to determine the duration of his office as general director. But he probably remained in office until 18 July 1841, or to 31 October 1841, when the General Directorate was abolished. HK, *Doc. No. 169* (28 Ca 1257/18 July 1841). HK, *Doc. No. 170* (15 N 1257/31 October 1841). Ahmed Şükrü kept the ministerial office after the Directorate abolished. For a short biography, see: Halil Kutluk, "Ahmet Şükrü Bey ve Zamanı," *Orman ve Av* 2 (1942).

Before it, one can also argue that the Imperial Shipyard had its own principles and rules for the management and administration of reserved forests, but they exclusively involved in the regular supply of timber for shipbuilding. Thus, the concerns that underlay the establishment of the General Directorate of Forests and the formulation of forestry rules and regulations by the Ottoman state becomes important.

Before the abolition of the General Directorate, Ahmed Şükrü had been able to create some local forest directorates in those regions which had busy piers to collect and supervise taxes from forest products. However, forest directors in the provinces acted as if they were local tax collectors. Also, they did not have any expertise in forest management, since almost nothing was done to improve the condition of forests.³²⁵ These officials abused their positions by imposing and collecting higher taxes at the expense of local people. For example, in some localities, they imposed irregular taxes which the government considered illegal, such as the so-called *dağ hakkı resmi* (fee to mountain usufruct) and *kum resmi* (fee for sand). These fees were in contradiction to former customary taxes, harming the ‘principle of equity’, for which the government stressed occasionally in successive documents. We indeed encounter a government complaint, which mentions that the reason of price increase in timber, wood, and charcoal was these extraordinary taxes, which put a heavy burden on the local inhabitants.³²⁶

The taxation of products obtained from private and *vakıf* (pious foundations) forests was another major problem. If the possessors had titles-deeds and deeds of trust (*vakfiyyet*), it was decreed that all the fees and dues taken from private and *vakıf* forests, apart from the old customs duty, were not legal.³²⁷ Henceforth none of

³²⁵ Kutluk, “Ahmet Şükrü Bey ve Zamanı,” p. 41.

³²⁶ HK, *Doc. No. 169*.

³²⁷ *Ibid*; HK, *Doc. No. 170*. On this point, also see: Süleymân Sûdî, *Osmanlı Vergi Düzeni (Defter-i Muktesid)*, ed. Mehmet Ali Ünal, vol. 1-3 (Isparta: 1996 [c1890]).

the local officials had the right to demand illegal fees for firewood and charcoal extracted either from the private and *vakıf* forests or from the coppices reserved for the use of villages and towns. However, the timber felled from the state, private, or *vakıf* forests were to be from the kind of timber unsuitable for the Imperial Shipyard and Arsenal.³²⁸ The official tax rates to be observed is as follows: For small timber picked up from private forests, the loggers would pay to the treasury 10 percent of its market price. From the state forests, on the other hand, the officials would get 20 percent for large timber and 10 percent for small timber in the name of cutting fee (*rüsum-ı kat'ıyye*) in accordance with the *Rüsumat Nizamnamesi* next to the traditional customs duty. For the firewood and charcoal transported for provisioning Istanbul, the officials were not allowed to take any fees. This rule was also applied to the exported firewood and charcoal, though their export was strictly supervised. To export timber, clients and sellers were to inform the Ministry of Trade on the amount, type and diameter of the trees, and the name and address of the logger. Only after providing this information, they could receive an imperial decree of permission.³²⁹ In other cases, there would be no permit for cutting and exportation.

Besides the problems and difficulties of application, these new tax reforms also raised the prices of timber, wood, and charcoal due to the continuation of extraordinary and irregular taxes. After the increase of local resentments, the government decided to return to the previous way of managing the collection of taxes. Thus, the government relegated the collection of all taxes from timber and

³²⁸ HK, *Doc. No. 183*.

³²⁹ “*Memalik-i Mahrusa-i Şahanede vaki gerek miriye merbut olan ve gerek ashabı uhdesinde bulunan ormanlardan kat' ve bilad-ı ecnebiyyeye gönderilecek kerestenin evveleminde talib ve bay'ileri çab ve mikdar ve cinsini Nezaret-i Ticarete ve Tersane-i Amireye ifade ve kat'-ı baha iderek ve ruhsatiye resmini virerek ba'dehu hakipa-yı hümayundan dahi istizan ile ruhsatı havi ferman-ı ali istihsal itmedikce velev bir ağaç olsun iskele ve ormanlardan nakl ve ihraç olunmaması mukaddema tesis ve bu def'a te'kid olunan nizamı iktizasından bulunmuş[dır.]*” HK, *Doc. No. 184* ([1268/1852]).

fuel wood to local governments, which was supervised by governors and arranged by local timber officials, because this seemed to be a more feasible solution. It was claimed that local officials did not comply with the forests rules and regulations. In short, the failure to collect taxes with these new forest officials, sent from the center, led the government to abolish the whole system. But it was unjust to accuse only these officials because of their maladministration. In fact, all shortages in the administration pointed up the limits inherent in the newly applied administrative and economic reforms.³³⁰

Apart from financial policies, the government was also concerned about the protection of trees. Two official documents stated that the governors and local officials of provinces were to establish a uniform standard for cutting trees from forests in order not to harm the regeneration of trees.³³¹ A memorandum presented by the Ministry of Trade displayed the worry that both the forests in the neighborhood of mines as well as the ones near to the coastal regions were depleted heavily and complained that the new regulations were not applied. We learn from this document that the forests that supply the wood and timber needs of the Shipyard, the Arsenal and many state construction projects, as well as urban needs had become degraded due to the inapplication of the method of rotation.³³² This regulation in fact constituted a forerunner of modern forestry practices, though it had been carried out in the forests reserved for the Imperial Shipyard for some time.

All of these regulatory provisions had important consequences for the trade in forest products. First if the government could eliminate the intermediaries and enable local people sell directly wood and charcoal to the consumers on their own, though the Directorate of Local Dues and Excises (*İhtisab Nezareti*) intervened and

³³⁰ HK, *Doc. No. 169*; HK, *Doc. No. 170*.

³³¹ HK, *Doc. No. 169*; HK, *Doc. No. 170*.

³³² HK, *Doc. No. 170*.

strictly controlled market prices to keep them uniform,³³³ it would contribute to the development of market relations and commercialization of the local economy. Second if the collections were strictly monitored the government could prevent contraband trade in firewood and charcoal and siphon the official taxes and customs duties until then demanded by local officials.

Despite all efforts, the collection of irregular taxes by local officials could not be prevented. On 14 November 1849, the government took a punitive measure by forcing some local officials in Izmir, who extracted 25 *para* from each load (*yük*) of wood and charcoal, to repay the sum to the local administration. Then the Ministry of Finances was to subtract this from the lumb sum tax of local inhabitants.³³⁴ Neither the administrative effort of modifying and fixing the taxes on timber, firewood, and charcoal for all regions nor the method of rotational cutting and replanting new trees did produce expected results because of the complexity of problems. Although export of wood and timber was formally prohibited, this restriction was usually transgressed.

Apart from the reorganization and regulation of the collection of taxes, the Directorate had to deal with the problems of state (*miri*) forests in the provinces. The sublease of many forests lands, previously categorized as state lands (*arazi-i miriyye*), to certain individuals by the *sahib-i arz* (*sipahis*, *mültezims*, and *muhassils*), either with a valid title deed or without, opposed by the government on the grounds that the *rakabe* (eminent domain) was to rest with the central treasury.³³⁵

Another basic government policy was to prevent provincial population to engage with trade in forest products. This policy was based on a twofold concern: On the one hand, the government worried that if the peasants postponed agriculture

³³³ HK, *Doc. No. 169*.

³³⁴ HK, *Doc. No. 178* (28 Z 1265/14 November 1849).

³³⁵ HK, *Doc. No. 169*; HK, *Doc. No. 170*.

and engaged mostly with forestry, this would mean a decrease in agricultural production. On the other hand, the uncontrolled trade of forest products constituted a threat on the tax revenues of the treasury. Though the administrative mind of the pre-1850s acknowledged the forest products to be a means of subsistence of the peasantry, both the delay of agricultural activities and the commercial exploitation of forest products were detrimental to the tax revenues of the state. When, for example, peasants of the districts of Kars, Bayezid, Muş, and Erzurum began to cut oak trees from the Soğanlı mountain and from other hill forests of Çıldır subprovince, the government ordered local officials to prevent such uncontrolled cuttings. According to official viewpoint, the villagers' "selfish greed for money" would cause the depletion of forests. The governor-general and the financial director (*defterdar*) of Erzurum requested from Istanbul the appointment of forest officials and guards to regulate the cuttings from these forests. These officials were to carry special marking tools to sign those trees allowed to be cut. The Sublime Council agreed on this proposal and issued a decree specifying the rules for cutting trees from these forests. Among these rules, the most important one was the regulation concerning annual cuttings with the permission of forest officials.³³⁶

Occasionally, the central administration encouraged local inhabitants to engage in non-timber forest production. For example, the government supported population, living nearby wooded mountains of Kastamonu and Safranbolu (northern Anatolia) to extract turpentine oil (*neft yağı*) from pine trees. Even an expert was sent from Bolu to teach modern techniques. The government thought that it was a profitable business for local people. When the first turpentine sample produced by the local dwellers reached Istanbul, the laboratory in the Ministry of Agriculture examined it and reported that it was better than the turpentine of many other provinces. Thus, the central administration requested from the governor of Bolu to provide convenient conditions to increase turpentine production. On this

³³⁶ BOA, *A. MKT. MVL. 10/72* (12 Za 1264/10 Oct 1848).

occasion, the government decided to support the production of similar profitable materials throughout the empire.³³⁷

3.2.2. Council of Navy and Forest Affairs

The new reforms were not restricted only to the arrangement of taxes. Before the foundation of the General Directorate, the Council of Navy (*Meclis-i Bahriye*) had been already established on 25 January 1840 to regulate all naval affairs in accordance with the Tanzimat reforms.³³⁸ Like the Directorate, however, this first Council could not work effectively due to the lack of a meaningful definition of functions and duties within the Imperial Shipyard, leading eventually to the resistance of the commander in chief of the Imperial Navy.³³⁹ The Council of Navy was dissolved about one year later until its re-establishment in 1845. Since the General Directorate of the Forests was dissolved in 1841, the Council of Navy under the patronage of the Ministry of Navy and the Ministry of Finances, was deeply involved in the issues of imperial forestry on behalf of the reserved forests, especially between 1845 and 1857.

During this period, it appears that the Council did resist to share its responsibilities with other governmental bodies, though in due course of time, the workload of the Council increased so much that temporary subcommissions began to germinate, starting from 1848. The first one was the subcommission, founded in

³³⁷ HK, *Doc. No. 174* (29 M 1261/7 February 1845).

³³⁸ Other titles used for this meclis: *Şura-yı Ali-i Bahri*, *Meclis-i Rüesa*, *Şura-yı Bahriyye*, and *Meclis-i Tersane-i Amire*. Ali İhsan Gencer, *Bahriye'de Yapılan Islâhât Hareketleri ve Bahriye Nezâreti'nin Kuruluşu (1789-1867)*, 2nd ed. (Ankara: Türk Tarih Kurumu, 2001), p. 137. The date of foundation is quoted from Savfet Bey's *Filâsalar* in: Gencer, *Bahriye'de Yapılan Islâhât Hareketleri ve Bahriye Nezâreti'nin Kuruluşu (1789-1867)*, p. 137.

³³⁹ Gencer, *Bahriye'de Yapılan Islâhât Hareketleri*, pp. 141-42.

October 1848, responsible of discussing naval reorganization and proposing new reforms, including the management of reserved forests of the Imperial Shipyard. The foundation of this subcommission was planned earlier but it was postponed because of the disagreements on its membership structure.³⁴⁰ It seems that the high-ranking officials of the Council rejected the attendance of members from the Sublime Council and Ministry of Finances. They claimed that these officials would attend the meetings only after the commission members negotiated the problems among themselves. Following their attendance, the final decisions would be wrapped up. The proposal of the Council to exclude members from the Sublime Council and Ministry of Finances from council membership was approved by the Sultan. Others being equal, the rejection revealed the jealousy of the naval officers in the matters concerning administration and management of forests. The official visit to the Imperial Shipyard by Sultan Abdulmecid in March 1846 also displayed that the resources of the Shipyard treasury were drained and there were not enough money and raw materials even for the necessary repair of ships in the docks.³⁴¹

This state of affairs makes it easier for us to understand the following correspondences. In a series of documents from 1846, the signs of a severe timber shortage can be seen. It seems to be that timber stocks in the storage of the Imperial Shipyard were depleted toward the end of that year. Leaving aside new constructions, there was virtually no timber even for the repair for the existing ships. The Ministry of Finances applied the Sublime Council for taking approval of cutting extra timber from the shipyard's *cibal-i mubaha* forests in accordance with the measures determined in the timber registers. After a superficial survey of the present condition of reserved forests, the central government ordered not to repair the ships of the navy with the timbers stored in the Imperial Shipyard, but to cut

³⁴⁰ BOA, *MMI*. 380 (18-25 Za 1264/16-23 October 1848). Cited in: Gencer, *Bahriye'de Yapılan Islâhât Hareketleri*, p. 202fn386.

³⁴¹ BOA, *MMI*. 352 (17 Ra 1262/15 March 1846). Cited in: Gencer, *Bahriye'de Yapılan Islâhât Hareketleri*, pp. 167-69.

down with suitable calibers and measures from the mountains that were attached to the Shipyard.³⁴² This application was confirmed on the grounds that the officials were to take the mutual consent of the local people in the payments for cutting and transport of timber. They were to also consider seasonal felling-times of trees during the cuttings.³⁴³ This and subsequent disorganizations in the provisioning of timber for the shipbuilding forced the Council to revise the traditional and time-consuming methods.

In mid-1851 the central government accepted the offer of the Admiral to arrange a subcommission within the Council of Navy to revise the regulations on cutting and culling timber from the attached forests of the Imperial Shipyard. This commission would consist of a couple of prudent members from the Sublime Council and Ministry of Public Works (*Nafi'a Nezareti*), and a few high-ranking officials from the Navy and state functionaries who had a knowledge of naval affairs. It was planned to get together one or two days each week for discussing the necessary arrangements. The first major task was to change outdated parts of the rules and regulations to make them more applicable. Second, the commission was to inform the government about probable obstacles that would hinder the benefits from such arrangements.³⁴⁴

Under the Council's administration a series of rules concerning forests were introduced. These rules were mostly related to preserving reserved forests of the Shipyard. Although they contained a couple of universal forestry principles, rotational and selective loggings, and shelter belt system, they were still far away from a systematic and regulated forestry practice. Except for the stricter stress on protecting mature trees, these rules and regulations were narrowly designed. They

³⁴² BOA, *A. MKT. MVL.* 2/89 (9 L 1262/30 September 1846).

³⁴³ *Ibid.*

³⁴⁴ BOA, *A. MKT. MVL.* 39/37 (11 R 1267/13 February 1851); BOA, *A. MKT. NZD.* 27/48.

did not contain any considerable measures for the protection of state/reserved forests. More precisely, they did not have an agenda pertaining to the general resource use of the Imperial Shipyard to prevent unauthorized cuttings from state forests or more precisely to control general resource use. The basis of intervention to forests, then, was to uphold the supply of the Shipyard's timber and non-timber resource needs. Nonetheless, the most important renovation of the Council was the design of a general inquiry to acquire a more encompassing knowledge of the empire's forests.

3.2.3. Conquest of the Forest: General Probe of 1851

Toward 1844-45, the government had already launched surveys of agricultural wealth, animals and state property to increase the revenues of the treasury. The surveys registered and classified property, including cultivated and uncultivated land, animals, stores, as well as agricultural produces and income of individuals gained from these goods and resources. The aim of these exclusive surveys was to organize a new taxation database to meet the fiscal needs of the Ottoman state, to increase the revenues, and to centralize the control of tax collection. They were done successfully in the Ottoman core provinces of Anatolia and the Balkans.³⁴⁵ In 1851, the central government commenced similar surveys for forests, but these remained unsystematic up to the 1860s.

The subcommission of the Council of Navy, established for discussing forestry problems in mid-1851, decided on 1 June 1851 to undertake a General Probe (*İstilanname-i Umumi*)³⁴⁶ to acquire a reliable picture of forest reserves of the Ottoman Empire. The initial preparations displayed that the Imperial Shipyard

³⁴⁵ For references refer to footnote 316.

³⁴⁶ BOA, *A. MKT. NZD. 37/95*.

did not have a worthwhile knowledge on the distribution of forests within the Empire, except for the major forests on the coastal areas which supplied the raw materials. The Admiralty prepared a list, covering almost all districts within the Empire, in which forests were likely to exist. But, the subcommission warned that there might not be forests in all provinces. Upon this remark, the Grand Vizierate admonished the commander in chief of the Imperial Navy to label clearly those regions in the attached list without any forests.³⁴⁷ To facilitate the progress of the Probe, the central government decided to apply it only to the state forests. Although not enunciated clearly in the introduction, the articles of the Probe manifests that the government did begin to consider the ‘good protection and management’ of state forests empire-wide.

The introduction text of the General Probe document provides us a glimpse into the mindset of the early Tanzimat bureaucrats concerning forestry. Here we encounter their concrete complaints and proposals to solve problems of forestry. First we see the condemnation of local officials who have not been respecting forest rules and decrees on the protection and regeneration of trees for some time. To the members of the subcommission, the result of the previous procrastination was the widespread cutting of trees at random by people for their private interests, especially for trade purposes. They added that such uncontrolled cuttings were mostly made in forests close to the coastal regions. Such forests were officially utilized by the Imperial Shipyard as well as by local people and if this situation continued, serious difficulties would appear in the wood provisioning. After these statements came the most important part of the introduction related to the administration of state forests. During their discussions on the rules and regulations about forests and timber resources, the Council members implied that since these encroachments were contrary to the public improvements and the policy of preservation of land (*arazi kaziyeye-i hayriyyesi*) wished and favored by the Sultan,

³⁴⁷ BOA, *A. MKT. NZD. 38/13* (29 § 1267/29 June 1851).

it would be better to attach the supervision and administration of all state forests to the Imperial Shipyard.³⁴⁸ The Council members also proposed the establishment of a bureau and a special Forest Board, composed of four members, within the Shipyard. This institutionalization would permit to discuss the questions concerning state forests and to issue necessary regulations related to them. Intimidated with these accounts, the central government affirmed the advice of the Council of Navy that these forests should be protected strictly against unauthorized encroachments in order not to suffer the future supply of timber, but did not accept to leave the state forests to the jurisdiction of the Shipyard.³⁴⁹

Considering the increasing need for raw materials and the augmenting financial crisis, these demands from the members emerged to be very legitimate. Nevertheless, these proposals required facts and knowledge about the actual conditions of forests. For this aim, the Council sent the Probe to the governor-generals, governors, sub-governors, and tax collectors in the provinces.³⁵⁰ Meanwhile, the government had already published hundred copies of this official

³⁴⁸ BOA, A. MKT. NZD. 37/95. The document says: “[m]eclisi-i acizanemizde derdest-i müzakere olan keraste ve ormanlar nizamatı sırasında saye-i ...cenab-i şahanede bu emr-i lazimü’l-i’tinanın dahi taht-ı rabıtaya idhali yani marrü’l-zikr miri ormanlarının cümlesi tersaneye rabt ile nezaret ve icra’atı Tersane-i Amire Nezaret-i behiyyesi tarafından rüyet olunmak üzere aklam-ı bahriyyede mevcud ve müstahdem ketebeden bir kaç katib tayiniyle bir Ormanlar Kalemi ve kezalik muvazzaf bendegandan olarak çünd azadan mürekkebi bir Ormanlar Meclisi tertib ve teşkili hüsn-i inzibat ve idareyi muceb olub ancak mezkur ormanların vüsat ve cesameti [sic.] cihetile her bir suretinin uzun uzadıya müzakeresile tesis ve ikmal-i nizamatı kaffe-i ormanların ahval ve keyfiyyetinin bi’l-etrafi bilinmesine mütevakıf olacağından ol babda su’al ve istilamı icab eden hususatı mutazammın kaleme alınub manzur-ı ‘ali-yi asafaneleri buyurılmak üzere leffen takdim-i hakipa-yı ‘ulya-yı daverileri kılınan İstilanname-i Umumi varakasından lüzumı mikdar tab’ ve temsil itdirilüb birer kıt’asının herbir mahallin vali ve mutasarrıf ve muhassıl ve kaymakamlarına evamirname-i sami-i cenab-ı vekaletpenahileri ile irsal ve tesyiri münasib gibi mutala’a kılınmış olmagla nezd-i ... sadaretpenahilerinde dahi rehin-i tensib ve muvafık-ı emr ü irade-i seniyye-i asafaneleri buyurıldığı takdirde icra-yı iktizası babında emr ü ferman hazret-i men lehü’l-emrindir.”

³⁴⁹ Ibid.

³⁵⁰ BOA, A. MKT. NZD. 44/109 (29 Z 1267/25 October 1851).

dispatch, which ordered the high-ranking local officials to investigate the conditions of state forests within their jurisdictions.³⁵¹

The answers to the questions in the Probe were to be written article by article in a register, accompanied by the stamps of the governmental officials and the members of the councils, and be sent within thirty days. Moreover, the answers to these questions were to be prepared not based on the common knowledge or previous information, but obtained by gathering the village elders and local experts (*erbab-ı vukuf*) from the villages in the neighborhood of forests before the local councils. Then, the highest ranking local officials employed in the forests, roads, and ports, either in person or by appointing their agents, were to investigate the information provided by the elders and experts. Owing to the fact that directors from the Ministry of Navy would be sent to the localities, the Probe warned that these questions were to be answered correctly. The officials who answered without investigating properly the actual situation and conditions of forests would be penalized accordingly.³⁵²

The Probe also mentioned that according to the imperial decrees, the cutting of suitable trees for the Shipyard from the mountains and groves (*koru*) belonging to the private owners was prohibited. The local councils were to pay great attention to the application of this rule. Thus, the Probe ordered that except for low quality building timber, if an exceptional caliber timber was felled and then brought to markets or ports, the local officials were to ban the transportation of them to other localities. The officials also were to send the Imperial Shipyard the information on the region and the forest where such trees were felled; the species and girth of trees; and the names of the owners. If the Shipyard found that these trees were suitable for shipbuilding, the local officials, then, were to purchase these trees with the fixed

³⁵¹ BOA, *A. MKT. NZD.* 37/33 (20 Ş 1267/20 June 1851).

³⁵² BOA, *A. MKT. NZD.* 37/95.

price set by the Shipyard according to the species of trees and the treasury of the Shipyard also undertook the payment of the felling and transportation costs.³⁵³

The Probe firstly interrogated the physical conditions of forests, their location, and area. The local officials were asked to state precisely the magnitude and boundaries (*cevanib-i erb'a*) of forests found in each sub-province and district, including the names of the districts, towns, and villages in the neighborhood; to specify the width and the length of these forests; to itemize the species and the approximate ages of trees found in these forests; and to list the names of the biggest cities located nearest to these forests and also their distance to them.³⁵⁴

The second group of questions was on the transportation facilities. The Council asked the officials to name the closest ports and coastal regions to these forests; to inform whether ports existed in the coastal areas and what kind of ships and boats could board them; and to inform whether these forests were proximate to a river and the possibility of using it for transportation with rafts and boats; and if they were, to which sea the river flowed. The local officials were also asked to inform the distances of paved roads and streets for the use of carriages. If there were no roads, they were to communicate suitable places for road construction, their investment expenses, and their would-be benefits, if they were built. They were to define the methods of transportation of trees cut from these forests as well, which means, whether they were being rolled from the mountains, or transported by the rivers or by carriages or pack animals.³⁵⁵

The third group was on the consumption of forest products. The Council wanted the officials to itemize which districts were obtaining firewood and timber and making charcoal from these forests; to name the localities to which the timber and other forest produce were freighted from these forests; to inform how much

³⁵³ Ibid.

³⁵⁴ Ibid., supplement 2.

³⁵⁵ Ibid.

shipload of wood and timber were being cut in these forests and what kind of timber they were; and to inform whether the trees of these forests were being cut for firewood and charcoal or for commercial purposes. If so, information was to be supplied as to where and how they were being transported.³⁵⁶

In relation to the questions on consumption, there was also a concern to learn about the local use of forests other than obtaining timber products. To this end, the Council interrogated the officials to inform whether any cultivation of cereals or its variety did exist within these forests; if yes, who cultivated them and in what amount; and to specify whether summer and winter pastures existed for sheep or cattle in these forests; and if it did, how much taxes were imposed on these pastures and who were collecting them.³⁵⁷

The Council also inquired the sawmills around forests and types of trees were sawed. The officials were asked to point out whether these saws were operated by private proprietors or by the state as well as the amount of taxes imposed on them and the feasibility and profitability of constructing new sawmills.³⁵⁸

Apart from these statements, the Probe also held responsible the local officials to detail whether any timber logged from these forests for the shipyard was leftover in these forests or in the ports; if it were, what amount, kinds, and girths they were and to inform whether it was possible to construct boats and ships nearby these forests. If such constructions were already taking place, how many boats and ships were being constructed annually.³⁵⁹

The last two groups of questions are on the revenues and possession of forests in the provinces. The Council demanded the officials to specify whether any taxes were being paid to the foresters, to customs officers or to some other individuals

³⁵⁶ Ibid.

³⁵⁷ Ibid.

³⁵⁸ Ibid.

³⁵⁹ Ibid.

from the trees that were felled for making firewood, charcoal, or for supplying timber for ships or buildings. They were to inform whether any tax was being paid from the forest products to the state treasury and other individuals; and if it was, how much and for what reason it was paid, and whether there were revenues from valonia, red chestnut, bulky juniper (obtained oil and gum), nutgall, resin, tar, linden fiber, and other comparable forest produce and the amount of aforesaid products were being sold annually to merchants. Finally, the officials were expected to list the girths and current prices of any type of commercial timber found in the ports or in the towns and consumed locally or transferred to other regions; and to prepare and send the price registers of firewood and charcoal.³⁶⁰

The questions regarding the possession of forests were the most crucial ones for determining the future of state's claims over forests. The Council expected the officials to investigate the title deeds of the proprietors of forests and to record authentic ones in the registers as well as to send a copy of valid deeds accompanied with the registers to the Ministry of Navy. The officials were to express clearly the forests reserved for some villages and to inform their needs and means of usufruct from these forests.

The Probe symbolized a new era in the penetrative tendencies of the Ottoman modern state into its forests. The government realized that the new projects concerning forestry could only be possible by a detailed information on the conditions of provincial forests. Articulating a local knowledge of forests would help the government to develop resources of the empire more efficiently, which was rather unthinkable in the pre-industrial period. Gathering all this information was entrusted to local officials. Officials were forced to provide detailed reports on the conditions of forests in their respective territories. This venture represented a new outlook to forest radically different than previous mentalities. It was the first attempt in the Ottoman Empire to make the forest more 'legible'. With the initiation

³⁶⁰ Ibid.

of the Probe, the modern state's concern to "order, measure, and discipline" soldiers and subjects, applied also to forests.³⁶¹ The timing of the Probe coincided with the articulation of political and economic problems in the provinces. The penetration of the Ottoman state into the provinces revealed many dynamics of local forest utilization and dissolved complex relations emerging from them.

3.2.4. Forest Question in Bosnia and Herzegovina

When the Revolutions of 1848-9 in Hungary threatened the security of the Austrian Empire and subsequently spread to Moldavia and Wallachia, the Ottoman government aimed to secure its boundaries with Austria.³⁶² Threatened by these revolutions alike, the Ottomans sent military detachments to the Principalities. The Ottoman military forces were under the authority of the higher functionary of the Sublime Porte (*amed-i divan-i hümayun*) Fuad Efendi (later Paşa) and lieutenant-general (*ferik*) Ömer Lûtfi.³⁶³ Ömer Paşa Latas, a Croatian convert and an able military commander during the Crimean War, traveled to Bulgaria and the Danubian principalities for a mapping assignment early in his military career in the Ottoman Empire, where he gained far-reaching knowledge of the territories. In

³⁶¹ David Blackbourn, *The Conquest of Nature: Water, Landscape, and the Making of Modern Germany*, 1st American ed. (London and New York: W. W. Norton & Company, 2006), p. 45.

³⁶² The littoral of Herzegovina, except for the narrow enclaves of Klek and Suttarina, was ceded to Austria with the treaties of Carlowitz (1699) and Passarowitz (1718). At the same time a strip of territory in northern Bosnia was given to Austria, which was thus able to control both banks of the Sava. This territory was restored to the Ottoman Empire in 1739 with the peace of Belgrade; but in 1790 it was reoccupied by Austrian troops. Finally, in 1791, the treaty of Sistova again fixed the line of the Sava and Una as the Bosnian frontier. Kingsley Garland Jane, "Bosnia and Herzegovina," in *The Encyclopaedia Britannica* (New York: Encyclopaedia Britannica, Inc., 1911), p. 284.

³⁶³ Cevdet Paşa, *Tezâkir, 13-20*, ed. by Cavid Baysun, 3rd ed. (Ankara: Türk Tarih Kurumu, 1991), p. 12.

1849, the government sent him to pacify the rebels in Bosnia and Montenegro, together with some immigrant Polish military officers and Austrian engineers. Motivated by the consequences of Ömer Paşa's governorship in Bosnia-Herzegovina, the central government began to consider the ownership of forests in these provinces.

Since the application of the Tanzimat reforms in the Balkans, discontent and uprisings fueled mainly by the local landowners -who resisted to the newly introduced tax reforms- increased. Two great massive revolts occurred in Nish (1841) and Vidin (1850).³⁶⁴ Both Christian and Muslim small peasantry suffered heavily from these revolts. They were squeezed both by the government and the local powerholders. Minor uprisings continued throughout the 1850s and the application of reforms became almost impossible until Ömer Pasha successfully suppressed these rebellions and set out to impose the Tanzimat reforms. He succeeded to decrease the political and economic power of the local landowners in Bosnia and Herzegovina; and applied Tanzimat provincial organization by appointing *kaymakams* to the districts (*kaza*) with full military power. After the suppression, in 1850, he changed the center of administration from Travnik, where local landowners were strongest, to Sarajevo, which had long been the commercial center of the province.³⁶⁵ Moreover, he tried to introduce in the same region direct tax collection in lieu of tax farming.³⁶⁶ These changes in administration and tax

³⁶⁴ On these revolts, see especially: Halil İncılık, *Tanzimat ve Bulgar Meselesi: Doktora Tezi'nin 50. Yılı, 1942-1992* (İstanbul: Eren, 1992). Halil İncılık, "Tanzimat'ın Uygulanması ve Sosyal Tepkiler," in *Osmanlı İmparatorluğu: Toplum ve Ekonomi Üzerine Arşiv Çalışmaları, İncelemeler* (İstanbul: Eren, 1993), pp. 361-424. Mark Pinson, "Ottoman Bulgaria in the First Tanzimat Period –the Revolts in Nish (1841) and Vidin (1850)," *Middle Eastern Studies* 11 (1975): pp. 103-46. Ahmet Uzun, *Tanzimat ve Sosyal Direnişler: Niş İsyanı Üzerine Ayrıntılı Bir İnceleme (1841)* (İstanbul: Eren, 2002).

³⁶⁵ William Miller, *The Ottoman Empire and Its Successors, 1801-1927*, 3rd ed. (London: Frank Cass, 1966 [c. 1927]), pp. 141-42.

³⁶⁶ Shaw and Shaw, *History of the Ottoman Empire and Modern Turkey*, pp. 149-150.

collection seems to be the precursors of a new policy of balance between the wealthy landowners and merchants.

Ömer Paşa knew that the wealthiest landowners in Bosnia had close connections with some bureaucrats in Istanbul, who could be an obstacle to his reformist measures. Thus, he applied certain measures to curb the power of the nobility without securing the approval of the central government. Perhaps the most important move was the execution of the governor of Bosnia and Herzegovina, Ali Paşa Rizvanbegović, a local notable who helped the Ottoman government to suppress the uprisings in the 1830s.³⁶⁷

While pursuing reformist policies in Bosnia and Herzegovina, Ömer Paşa also became involved in the local politics of forestry and timber trade. His policies led to the disruption of the close relationship between local powerholders and Austrian timber merchants, which until then ensured the illegal cutting of state forests. After the death of Ali Paşa, Ömer Paşa disclosed his hidden contracts made with Austrian timber merchants concerning the forests of Bosnia. According to these contracts, some of the wealthy merchants received the right of felling wood and making charcoal from the Bosnian forests for twenty years. Besides, they built a timber factory on one of the estates that belonged to the late governor. In fact, this was the only timber factory in Bosnia before the 1860s.³⁶⁸

The Ottoman documents reveal that the Austrian merchants were also actively involved in commercial relations with other local Ottoman administrators by way of the trade partnerships they established.³⁶⁹ These informal partnerships for exploiting the forests in Bosnia disclosed that the Ottoman centralization efforts

³⁶⁷ In 1840, he suppressed a Christian uprising and rewarded with the governorship of Herzegovina. Jane, "Bosnia and Herzegovina," p. 285.

³⁶⁸ Palairt, *The Balkan Economies c. 1800-1914*, p. 178.

³⁶⁹ BOA, *A. MKT. MVL. 50/98* (15 Ca 1268/7 March 1852); BOA, *A. MKT. MVL. 57/58* (12 Z 1268/27 September 1852).

since the Tanzimat was, in effect, a ‘bubble’, which depended on local factors that the central government could not control effectively.

The government and Ömer Paşa vehemently warned that if the merchants continued to fell trees from these forests every year in the same amount, the forests of Bosnia and Herzegovina would soon be decimated. Thus these companies were to be banned.³⁷⁰ Ömer Pasha claimed that the former governors of Bosnia and Herzegovina accustomed themselves to accept money in return for granting licenses to such foreigners.

Once Ömer Paşa took full control of the affairs in Bosnia and Herzegovina, their licenses were annulled, though some 5,000 logs had been cut and exported until then.³⁷¹ Upon the cancellation of the contracts, Austrian companies demanded reauthorization to make charcoal in Bosnian forests close to the Austro-Ottoman border. They claimed that they used to cut trees from these forests without any hindrance up to the arrival of Ömer Paşa. When the incident was reported in the capital, the government investigated the situation by asking a report from the provincial council (*eyalet meclisi*) of Bosnia. The council replied that because of the disturbances in Austria (1848-49 Revolutions), the merchants could not realize the terms of these contracts. Meanwhile, the Austrian consulate in Bosnia was pressing the council to protect the rights of their merchants to cut timber and making charcoal from the local forests on the basis of the contracts they made with the former governor. Since the merchants had built a timber factory and cleaned up the river Neretva, the council recommended the government not to revoke the contracts because of the material benefits to the treasury and added that if the government invalidated these contracts, the good relations with the Austrian state

³⁷⁰ The most crucial statement is that the government declared that nobody could have cut trees from forests that were state property (*emlak-i miriye*) without a license, thus the Ottoman state had the right to ban the foreigners from producing charcoal within its territories. BOA, A. AMD. 22/22 (24 Z 1266/31 October 1850).

³⁷¹ “Herzegovina,” *The Times*, 30 August 1875, Issue 28407.

would be damaged. The council's reaction displays that the members were also in close collaboration with Austrian merchants.³⁷²

The government accused the council of trying to avoid the 'main question' and making excuses for the damage that these contracts made to Ottoman administrative and property rights on forest land. For the government, such contracts were threats to the 'good governance' that the Ottoman state aimed to establish in Bosnia and Herzegovina:

[W]hile the contracts entered by preceding officials would be honored in consistency with the institutional order and current procedures, the person who dares to sell the timber from forests belonging to the state on his own and gives permits to build factories, while no official has such a right or permission, has indeed forgotten his subjection to the state and has left the circle of officialdom. Clearly such contracts that he has made will be cancelled.³⁷³

This order again manifested that nobody could cut trees from state property or engage in timber trade without obtaining an official license.³⁷⁴ Though the permits of the Austrian merchants were annulled, the government continued the former local practice and granted licenses to other merchants. For example, a certain Mazoni, an Austrian merchant, applied to the Sublime Porte for cutting trees from the forests of Banailuka in June 1850. He was given a *buyrıldı* (patent) including a license for cutting trees, regular for a period between 14 February and 9 August 1850 (1 R 1266-30 N 1266). According to this *buyrıldı*, if the merchant wished to employ his own loggers—acknowledging beforehand that he was to be responsible from the all acts of his employees during the cuttings—he was to deposit their passports until the felling process concluded, at most three months following the end of the contract. The licenses entitled him to cut trees even from private or

³⁷² BOA, *A. MKT. MVL.* 50/98.

³⁷³ *Ibid.* I will deal with the remaining part of this story in the fourth chapter, because these events continued until 1870s.

³⁷⁴ Also see: BOA, *HR. MKT.* 55/82; BOA, *A. MKT. MHM.* 36/8 (29 L 1267/27 August 1851).

communal forests for producing barrel staves if he obtained the consent of the possessor. The government also sent a dispatch to the local officials of Bosnia, especially the *mütesellim* (deputy lieutenant-governor and local collector of taxes and tithes) Ali Bey of Banialuka district, not to constrain the activities of the merchant.³⁷⁵

The long consultations with the Austrian Embassy softened the Ottoman diligence concerning the cancelled contracts. The Sublime Porte sent a note to the general inspector Kamil Paşa and to the governor of Hersek in February 1853 stating that though the contracts made between Ali Paşa and two Austrian merchants, Filoki? and Schonkelt?, had been annulled, the central government decided to execute these contracts after Kamil Paşa's presentation of a report on the revenues and the annual value of farming out during Ali Paşa's governorship. Kamil Paşa was to comment on whether it was better to exploit these forests *emaneten* (direct administration of forests by the state agents) or to tender with parceling out forest tracts after making contracts with Ottoman subjects. The government also wondered if the exploitation of these forests by foreign merchants was detrimental to the public administration and whether the damages of these merchants caused by the termination of their contract could be compensated if these forests were tendered to Ottoman subjects.³⁷⁶ These investigations revealed that some of the merchants were given authorization to execute their contracts.³⁷⁷

When the government decided to maintain the contracts of Austrian merchants, the Serbians also petitioned for the application of the same right for themselves. After the government annulled the contracts of the Austrian timber merchants and prohibited cutting trees from Bosnian forests, the Serbian peasants

³⁷⁵ BOA, *A. MKT. UM.* 17/72 (27 B 1266/8 June 1850).

³⁷⁶ BOA, *HR. MKT.* 57/40 (19 Ca 1269/28 February 1853).

³⁷⁷ The disputed contracts were officially renewed for fourteen years in 1858. BOA, *A. MKT. MVL.* 96/44 (24 B 1274/10 March 1858).

were very affected from this prohibition. The Serbian *kapı kethüdası* (official representative of the provincial governor) petitioned the government to release the prohibition because it was rather inexpensive to cut and transport timber from Bosnian forests for local consumption. The Porte accepted their petition on the grounds that they were faithful Ottoman subjects. The local governors of Bosnia and Herzegovina and Kamil Paşa were to respect the export of timber firewood to Serbia. However, the central administration warned them that neither the Austrian nor the Serbians were allowed to cut forests on the borders with Austria and Serbia, because these forest were considered to be ‘natural fortifications’.³⁷⁸

Meanwhile, there were considerable problems concerning the supply of necessary timber and other forest products for the building of fortifications in the fortresses of the Danubian front. The military personnel could not handle the fellings and transports at the same time, mostly due to export of forest products by corrupt military and local officials in collaboration with foreign merchants in spite of the orders by the Customs Office.³⁷⁹ For example, felling trees from the Kamçı Mountain was prohibited due to the timber obtained freely from this mountain by the director of the *Compaigne de Rumelié*, Mardros, a certain shipowner Benako from Varna, and other shipowners. The central government ordered the governor-general of Varna, the Grand Admiral and Ministries of Finances and Customs that this timber was to be confiscated and sent directly to Istanbul. It was told on to the government that these people were selling firewood and charcoal to foreign ships, especially Russian, in the offing. The same document also sanctioned the subgovernors and directors in Balçık, Mangalia, Köstence, Missivri, and Kozluca (all in Varna subprovince of Silistre) to control the merchants from Istanbul, as to whether they took permission from the *Ihtisab Nezareti* for bringing firewood and

³⁷⁸ BOA, *A. MKT. UM.132/50* (12 B 1269/21 April 1853).

³⁷⁹ BOA, *I. MM. 21/7* (21 C 1270/21 March 1854); BOA, *I. MM. 21/10* (29 C 1270/29 March 1854); BOA, *I. MM. 21/20* (12 C 1270/12 March 1854).

charcoal to Istanbul. Bringing charcoal and firewood to other provinces, on the other hand, necessitated warrants granted by the Customs on the condition that the merchants provide solvent guarantors.³⁸⁰

In spite of the tight measures the government had taken, neither the misdeeds of local officials nor the unofficial local contracts could be prevented until the 1860s. For example, in 1859, the governor of Banialuka subprovince contracted 10,000 trees from the Kasanar Mountains to an Austrian merchant, named Hristo. Hristo also received another contract for cutting 2,000 trees from the forests on Duchiak Mountain of the village of Birle in the Derbend district of the same province. But Celebzade Osman Ağa presented *hücece-i şer'iyye* and *tapus* (deeds granted by local courts) and claimed that the mountain was his property and included only 2,000 trees. Thus he requested to prevent the merchant. The central government asked the situation from the subgovernor of Banialuka, Adem Efendi, but he did not respond. The problem was referred to the Supreme Council. The Council decided to interrogate the actual condition of the mountain from the governor-general of Bosnia and decide whether Osman Ağa's cause was just or not.³⁸¹ The government sent Sadık Bey, chief clerk of the financial office (*mal başkatibi*) of Bosnia (capital), to investigate the situation. Sadık Bey informed the government that the said merchant was cutting trees in excess numbers from the state forests and that he was not paying any taxes either. The total value of transferred timber (over the amount written in the license) was about 1,195,000 *guruş*. The one-fifth and the one-tenth (the tithe) which makes 358,000 *guruş*, was due to the Ottoman government. But Hristo paid only 30,000 *guruş* for the tithe of 2,000 trees. The due amount of one fifth (*fiyat-ı miriyye*) was unpaid. Apart from this, the timber from 20-30 different tree species was not declared due to the

³⁸⁰ BOA, *HR. MKT. 55/82*.

³⁸¹ BOA, *A. MKT. UM. 346/74* (16 Ş 1275/21 March 1859).

embezzlement of Adem Efendi. He was, then, invited and interrogated in Istanbul. It seems that consequently, he was forced to leave office.³⁸²

The Bosnian forest problem probably sparked off the government's attention to provincial forest resources. Moreover, the increasing demand of the Imperial Shipyard for timber, especially after the Sinop disaster on 30 November 1853, and uncontrolled cuttings from the state forests during the Crimean War motivated the Ministry of Navy to monopolize the administration of forests.³⁸³

Meanwhile, the growth of financial burden and the development of the military bureaucracy during the Crimean War as well as the need for public improvements impelled the Ottoman government to borrow loans from the European powers. The military efforts on the Danubian front made one thing very clear for the first time: the need for ready cash. Since the military expenditures of the government increased sharply, the Imperial Treasury was facing a financial crisis. Moreover, after securing the Danubian territories, Ömer Paşa planned to set in force a wider expedition into the Moldavia and Wallachia that necessitated more money. With the offer of Ömer Paşa and with the approval of the Council of Provisory Military Affairs (*Meclis-i Muvakkat-ı Askeriye*), the government decided to borrow cash money from the famous Jewish banker Hillel Manoach, who had considerable property in Bucharest and who was an agent of the famous Rotschilds family, in local currency that was equal to 2,500,000 *guruş*.³⁸⁴ More important than this local loans, military activities during the Crimean War forced the Ottoman government to borrow a large international loan from the French and British bankers for the first time in 1854. Immediately after the end of the Crimean War

³⁸² BOA, *A. MKT. UM.* 358/52 (1 M 1276/31 July 1859).

³⁸³ BOA, *I. HR.* 6848 (12 L 1272/16 June 1856).

³⁸⁴ BOA, *I. DH.* 19511 (7 Ca 1270/5 February 1854). Hillel Manoach with the other Jewish banker Abraham Halfon would be the major sponsor of Ottoman military expenditures in the Danubian front until the majority of the army moved to Crimea.

and the conclusion of the Paris Peace Treaty, the Ottoman government turned its attention to internal improvements to meet the growing fiscal demands of the central treasury. By this time, the forests of the Empire emerged to be an important source of wealth, maybe as a compensation for the loans received, which were to be administered and managed in a more serious manner.

3.3. Scientific Knowledge in the Service of the Ottoman Empire

Toward the final years of Mahmud II, the government came to consider scientific-technical expertise in state service as an important policy for development and for using state's natural resources effectively. At that time, we see the reformist statesman Mustafa Reşid Paşa as the main activist of this policy. During his first foreign ministry, on 7 July 1838, a six-membered council, the *Meclis-i Filahat ve Zira'at ve Ticaret ve Sana'at ve Hirfet-i der Bab-ı Ali* (the Council of Agriculture, Husbandry, Trade, Industry, and Manufacture of the Sublime Porte), under the chairpersonship of Nuri Efendi, the undersecretary of the Ministry of Foreign Affairs, was established. Except for the chairperson, there would be five members, who were “worthy of confidence and well versed in matters” concerning each field. The main task of this commission was to discuss the means of developing natural and agricultural resources as well as to recommend new projects to promote the growth of commercial, manufactural, and industrial productivity. The government also sanctioned the commission to communicate with technical experts, both internal and external, and to apply their expertise in these fields.³⁸⁵

³⁸⁵ *Takvim-i Vakayi*, no. 167, 14 R 1254/7 July 1838. The reports of the Council would be first presented to Reşid Paşa and from him to Mahmud II.

Inviting experts from Europe was not foreign to the Ottomans since Selim III, but these early experts were mostly responsible for military reorganization.³⁸⁶ The first foreign expert who was given a task outside military reform was an Austrian mining engineer, Gustave de Pauliny. He was permanently employed by the Ottoman government in 1836 to prepare reports on the condition of Ottoman mines. Immediately after the declaration of the Tanzimat edict, he became the director-general of mines in the Ottoman Empire, under the jurisdiction of Ministry of Finances and began to share administrative responsibilities with the superintendent of the Imperial Mines (*Maden-i Hümayun emini*). This was an innovation, since for the first time a foreign Christian expert became an administrator at a civil state body. Pauliny brought some Austro-Hungarian mining engineers as well, who were employed in Ergani and Keban mines in 1843, to supervise the supply of fuel wood and charcoal and their effective usage.³⁸⁷

Before Pauliny's extensive surveys on the general conditions of mining in Anatolia, which continued for seven months and the results of which were presented to the Sublime Porte in January 1837,³⁸⁸ a British entrepreneur, James Brant prepared two memorandums on the conditions of Ergani (Diyarbakir) and Keban mines, and made recommendations for the increase of production.³⁸⁹ The output of the Ergani mine had been declining rapidly since the late eighteenth

³⁸⁶ For a comparison the use of 'foreign' experts in the early modern France and the Ottoman Empire, see: Christine Isom-Verhaaren, "Shifting Identities: Foreign State Servants in France and the Ottoman Empire," *Journal of Early Modern History* 8, no. 1-2 (April 2004).

³⁸⁷ BOA, *A. AMD.* 8/11 (20 C 1265/13 May 1849); BOA, *A. DVN. DVE.* 15/12 (13 B 1268/3 May 1852). Tızlak also mentions about these engineers, but he gives the date as 1842. Fahrettin Tızlak, *Osmanlı Döneminde Keban-Ergani Yöresinde Madencilik (1775-1850)* (Ankara: Türk Tarih Kurumu, 1997), p. 152.

³⁸⁸ *Haus-Hof und Staatsarchiv (HHS) Türkei VI-66*, January 1837. Published in: Issawi, *Economic History of Turkey*, pp. 283-86.

³⁸⁹ "Memorandum by James Brant," Public Record Office, *Foreign Office Series (FO) 78/289*. Published in: *Ibid.*, pp. 281-82.

century, largely because of lack of fuel, causing a fall in the output.³⁹⁰ Had the fuel be obtained, the amount of production could rapidly increase. But as Pauliny states, though pit props would increase if the government decided to enlarge the shafts, the unavailability of fuel for the furnaces was one of the major problems of the mining enterprises in the Ottoman Empire that at most spots there was either a complete lack of wood or there were overcut forests, which neither the government nor the local people considered to regenerate as an essential remedy for the mining industry.³⁹¹ The mining industries created social and political problems because the state tended to protect the surrounding forests from customary usufruct rights of local communities. Besides, the government used forced labor while supplying fuel to the state-led mines.

The wood and charcoal of these mines were provided by the neighboring districts without payment. They were carried by pack animals from mountains at a distance of twelve to eighteen hours [approximately 40-65 kilometers]. The contributions of the neighboring districts were estimated by the *sarraḫ* (moneychanger) of the mine, at a level usually much lower than the market prices. At present, the peasants were obliged to furnish it at three *guruş* per horse-load, whereas the cost of hiring a horse, if the peasants did not themselves possess it, was about 10 *guruş* per load.³⁹² The numbers make clear that the Mines Administration was oppressing people while obtaining the supplies of wood and charcoal.³⁹³ To

³⁹⁰ “Report on Diyarbekir,” *FO 78/3070*. Cited in: *Ibid.*, p. 278.

³⁹¹ *HHS Türkiye VI-66*. *Ibid.*, p. 285.

³⁹² This information was given by Pauliny to the British vice-consul at Samsun. MacGregor, *Commercial Statistics*, p. 119. The vice-consul, then, sent it to James Brant on 20 December 1841. *FO 78/491*. Published in: Issawi, *Economic History of Turkey*, pp. 282-83.

³⁹³ For example, Brant said that “if the workings of mines in Turkey were given up to private persons and a Seignorage paid to Government out of produce, and if European Capital and Science were allowed to be applied to the work, the mines would be fruitful source of revenue to the state and of wealth to the population, but so long as the management is in the hands of Government Agents,

overcome the difficulties of supplying fuel for the mines, Pauliny also surveyed the woodlands in the neighborhood. For example, the nearest forests to the Ergani mine, where wood could be available, was at 12 hours distance. Pauliny proposed to make charcoal on the spot, and send it to the mines instead of wood.³⁹⁴ By this way, the mines would secure an important amount of money, which meant a reduction in the costs of working the mines. Besides, the workload of peasants would be reduced to a more bearable state. Besides the environmental pollution that these mines caused in these regions, it seems that they also exhausted forest resources around the vicinity and thus the cost of production was affected very much from the difficulties of supplying enough fuel for the furnaces. However, not all mines were suffering from the lack of fuel. For example, the woods in the vicinity of the lead mines on the Taurus Mountains provided fuel in abundance for the furnaces at Gülek Pass.³⁹⁵

Pauliny's report provides important information on the conditions of forests in the neighborhood of Ottoman mines.³⁹⁶ He stated that the forests, as being the main suppliers of charcoal and logs for decomposing mineral ores, have receded to

so long as the system of forced labour and of contributions of materials from the neighboring districts be continued, mines must inevitably be the source of intolerable oppression and ultimate ruin to the people, they cannot be highly beneficial as revenue to the State and the advantage now derived will be progressively diminishing." *FO 78/289*. Issawi, *Economic History of Turkey*, p. 281.

³⁹⁴ A load of wood of 120 *okkas* (about 154 kilograms), was equivalent in power to 10 *okkas* (12.8 kilograms) of charcoal. The price paid for a load of wood was 36 *guruş*, on the other hand a load of charcoal would cost 15 *guruş*. Thus the cost of the fuel would be reduced by 21 *guruş*, if charcoal were substituted for wood. *FO 78/491*. *Ibid.*, p. 283.

³⁹⁵ "Memorandum by John Clapperton, 19 November 1845, *FO 78/615*. *Ibid.*, p. 287.

³⁹⁶ All these mines, nine silver, three lead, and four copper, were administered directly by the government. On the other hand, the government did not want him to visit the iron smelting works, which were under the authority of the Kapudan Paşa. *HHS Türkiye VI-66*. *Ibid.*, p. 283.

a great distance from the mines which, in turn, increased the production and transportation costs. The existing forests, for example, had the capacity to provide the demand at most for 20 to 25 years, unless the Government reforested the woods near Ergani, which formerly supplied the fuel. Moreover, Pauliny proposed another important measure for the continuation of production: constructing railroads between mines and forests, which could provide a permanent advantage and lessen costs. Though the undertaking would require a heavy outlay, it would soon be recovered by savings in the transportation costs. Pauliny also advised the government to allow European companies to work unexplored mines in many parts of Asia Minor by receiving a seigniorage, instead of establishing new state enterprises.³⁹⁷

It is worth noting that Pauliny did not mention the scarcity of beams and balks used in these mines. We know that the beams for the pits at Keban and Ergani were brought from Kemah, Kuruçay, and Eğin, located more than 100 kilometers away from the Keban and Ergani mines, which meant transport costs were very high. Pine trees were mostly preferred as beams and balks. On the other hand, oak trees were definitely used for charcoal burning.³⁹⁸ Another point in Pauliny's report reveals that the forests in the neighborhood of Keban and Ergani were destroyed heavily by extensive cuttings and that these forests were not reforested.

Until the end of the 1840s, the number of Austrian professional miners in the Ottoman service increased. In a document dated from June 1844, we know that a couple of Austrian mining and forest engineers, some master miners and many ironworkers were active in the smelting houses at Ergani and Tokat.³⁹⁹ Except for one, a certain Grober, who the Ottoman government requested to prolong his duration of service, the Austrian mining and forest engineers remained in Ottoman

³⁹⁷ *FO 78/491* and *HHS Türkiye VI-66*. Ibid., p. 283 and 285.

³⁹⁸ Tızlak, *Keban-Ergani Yöresinde Madencilik*, p. 115, 146, and 171ff.

³⁹⁹ See for further details: HK, *Doc. No. 173* (19 Ca 1260/6 June 1844).

service until May 1852.⁴⁰⁰ Although not employed specifically for forestry reform, these Austrian forest engineers preceded the French forest experts, who would be solely responsible from the empire forestry between 1857 and 1878.

3.3.1. Council of Public Works and Scientific Forestry

As was discussed in previous chapters, before the development of scientific forestry, Ottoman state considered the forests solely through ‘the fiscal lens of the revenue needs’ of the public treasury and the Imperial Shipyard.⁴⁰¹ Even after the Tanzimat regulations, the central government issued imperial decrees mostly to regulate the supply of timber for the shipyards, for public works, for military purposes, and for forest taxation. It was only during the second half of the nineteenth century that the Ottoman government designed new and compact models to render forests more productive. After the end of the Crimean War and the Paris Peace Treaty in 1856, the Ottoman state accepted a program for administering not only forests, but all other natural resources. The first attempt was the establishment of the Council of Public Works (*Meclis-i Me‘abir or Conseil des Travaux Publics*),⁴⁰² on 31 October 1857 as an institution of decision making and planning.⁴⁰³ The Council of Public Works was responsible in matters like construction of roads and railways; cleaning rivers, waterways, lakes, and ports; drying up swamps; building industrial enterprises and irrigation systems,

⁴⁰⁰ BOA, A. DVN. DVE. 15/12.

⁴⁰¹ The quotation is from: Scott, *Seeing Like a State*, p. 23.

⁴⁰² In the official documents both of these titles used together and almost all correspondences were translated either into French or Ottoman Turkish. The Council came to be called as *Meclis-i Nafi‘a* later.

⁴⁰³ Ali Akyıldız, *Osmanlı Bürokrasisi ve Modernleşme* (İstanbul: İletişim, 2004), p. 70.

agricultural improvements and productivity, improvement of prisons, forestry and mining enterprises and the like. Through this council, the central government aimed at taking full control of traditional ways of managing natural resources.

Apart from forest specialists, the Ottoman government also demanded many technical specialists from Europe after 1856. For example, a French agricultural expert was invited before 1860 to advise for the increase of agricultural productivity in the Dobrudja valley.⁴⁰⁴ One must add the Romanian revolutionary, Ion Ionescu de la Brad, who was also an agricultural expert, fled to the Ottoman Empire in 1848 and stayed there until 1857.⁴⁰⁵ Moreover, we are informed by the *Journal of Agriculture*, published in Scotland, that about twenty-five agricultural laborers and their families sailed to the Ottoman Empire, where they were going to be employed in introducing the Scotch system of farming in an extensive estate, in the neighborhood of Istanbul, acquired by Thomas Parry.⁴⁰⁶ Despite these developments, Cevdet Paşa criticized the administrative efforts after the Crimean War, claiming governmental indifference and negligence of public improvements.⁴⁰⁷ The reasons why he thought as such will be discussed later in this and following chapters.

⁴⁰⁴ A. Gaudry, *Recherches Scientifiques en Orient* (Paris: 1860). Quoted in: Halil İnalçık, "Filâhâ," *Encyclopedia of Islam*.

⁴⁰⁵ He was a graduate of the Ecole Agricole de Roville and wrote two books on the agriculture of the Ottoman Empire: *Excursion agricole en Dobdroudja* and *Excursion agricole en Asie Mineure*, which were published in Istanbul in the 1850s. I thank Alp Yücel Kaya for providing me with this information.

⁴⁰⁶ *The Journal of Agriculture, 1857-1859*, Edinburgh, 1859. The Making of the Modern Economy. Thomson Gale. 2006, National Library Week Trial, 30 April 2006, pp. 14-15.

⁴⁰⁷ Ahmed Cevdet Paşa, *Ma'rûzât*, ed. by Yusuf Halaçoğlu (İstanbul: Çağrı Yayınları, 1980), pp. 47-48. Cevdet Paşa, *Tezâkir*, 13-20, pp. 23-24.

From its beginning, all forest specialists in this council were Frenchmen. Louis François Victorin Tassy (1816-1895) and Alexandre Stheme (1814-1887)⁴⁰⁸ came to study the needs of forest lands and to arrange reforms for the Ottoman forests. Tassy even became the general secretary and deputy chairperson in the Council of Public Works. These people were said to be experts “competent for office without any doubt” (*ehliyetine şüphesiz olmayan*), who would help the government in its endeavor.⁴⁰⁹ Until the establishment of a general administration, the Council of Public Works under the authority of Ministry of Trade was responsible for the protection of forests and the regulation of cutting trees.

In the early days of the activities of the Council, the most important question was whether there were extensive forest lands in the Ottoman Empire; a question concerning potential natural wealth of the state.⁴¹⁰ Although there were no reliable statistics at the time, it was in general assumed that there were large forests in the Ottoman Empire. As was discussed in Chapter 2, this assumption was largely based on traditional impressions, traveler accounts, newspaper articles and various reports of the government officials who worked in those provinces that had large amounts of forest areas, such as Bosnia, Bulgaria, Thessaly, and Macedonia.

⁴⁰⁸ For biographies of these French forest experts, see: Gérard Buttoud, *Les conservateurs des eaux et forêts sous la troisième république (1870-1940): matériaux biographiques pour une sociologie historique de la haute administration forestière française*, Institut National de la Recherche Agronomique, Département d'économie et de Sociologie Rurales, [et le] Laboratoire d'économie forestière de l'école Nationale du Génie Rural, des Eaux et des Forêts (Nancy, 1981). For very brief biographies in Turkish, see: Halil Kutluk, “Türkiye’de Yabancı Ormancılar,” in *Türk Ormancılığı Yüzüncü Tedris Yılına Girerken, 1857-1957* (Ankara: Türkiye Ormancılar Cemiyeti, 1957).

⁴⁰⁹ R. Bernard, *Türkiye Ormancılığının Mevzuatı, Tarihi ve Vazifeleri*, trans. N. B. Somel (Ankara: Yüksek Ziraat Enstitüsü, 1935), p. 109. Bernard claimed that there was also one British forest expert in the Council, but I could not find any references mentioning the name of this expert, though there was a British expert in the Council. Presumably, Bernard mentions Stheme, who was actually a French *conservateur*.

⁴¹⁰ Bricogne, *Ormancılık Heyeti*, p. 4.

A second question was how the forests were administered. Almost all foreign forest experts argued that it was an administration of ‘unconditional freedom’ (*mutlak serbesti idaresi*), supported by no control, and without restrictions on the cutting of trees.⁴¹¹ Members of the Council claimed that the existing conditions necessitated special rules and regulations, which would include the establishment of methods of *aménagement* and the protection of forest land. To protect and ameliorate forests, the Council urged to raise and train personnel. The proposed measures included:

1. the foundation of a Forestry School (*Orman Mektebi*)
2. the design of a regulation (*nizamname*) that takes local conditions and traditions (*ahval ve adat*) of the country into consideration
3. the compilation of an exemplary specifications (*satis̃ şartnamesi*) to increase the revenues from forests.⁴¹²

3.3.2. Foundation of the First Forestry School

Louis Tassy founded a forestry school within the Ministry of Trade in 1857.⁴¹³ The foundation of the forestry school was a sign of a desire to transform the customary forest practices based on traditional local knowledge. The new science-based approach to forestry also came to challenge the practical management and outdated silvicultural techniques of the naval officers. The Forestry School signaled also the establishment of the domination of forest science (*orman fenni*) in the management and regulation of forests.

⁴¹¹ Ibid.

⁴¹² Ibid., pp. 4-5.

⁴¹³ İsmail Eraslan, *Türkiye’de Ormancılık Öğretim ve Eğitim Kurumlarının Gelişimi* (İstanbul: Ormancılık Eğitim ve Kültür Vakfı, 1989), p. 3-4; Osman N. Ergin, *Türk Maarif Tarihi*, 5 vols., vol. 2 (İstanbul: 1940), p. 494.

Tassy's book (or some parts of it) on forest management was translated into Ottoman Turkish by Osman and Artin Efendis, students of the Forestry School, in 1861⁴¹⁴ and it became the major textbook in Ottoman forestry education. In this book, the *Etudes sur l'aménagement des forêts* (1858 edition),⁴¹⁵ Tassy discusses the necessary improvements and measurements to ensure a successful forest management, the fundamentals of scientific forestry (the principles of minimum diversity, balance sheet, and sustained yield), the methods to be applied to discover the age of trees suitable for felling to make them more productive. These fundamentals and methods were to be applied to all kinds of forests either belonging to the state, to public (belonging to villages and towns), or to private individuals, because by this way it would become possible to know how to regulate a particular forest and the pace of the annual cuttings. The systematic application of these methods would guarantee a constantly increasing revenue for the state. The last part of his work is devoted to an analysis of reforms which would bring the forestry rules and regulations to the interests of the public and private individuals.⁴¹⁶

As being the first director of the Forest School, or the 'nursery of the forest administration', Tassy confronted many obstacles: First of all, he encountered difficulty in finding students due to the long training period (four years). Second, the uncertain future of the forest administration did not inspire much confidence among the public. And finally, it was difficult to find enough students who had

⁴¹⁴ BOA, *A. DVN. MHM. 33/97* (1278/1861); BOA, *A. DVN. MHM. 33/99* (1278/1861); HK, *Doc. No. 200* (27 R 1278/1 November 1861). It seems that this book was not published, but manifolded and distributed among the students.

⁴¹⁵ Louis Tassy, *Etudes sur l'aménagement des forêts* (Paris: bureau des Annales forestières, 1858).

⁴¹⁶ *Ibid.*

primary education among the Ottoman citizens, especially among the Turks.⁴¹⁷ Candidates, then, were required to have a fundamental knowledge of at least in French. Initially nine students attended the school. The government assured them that they would be employed in the Forest Administration as soon as they graduated.⁴¹⁸ When eight of them graduated in 1861, however, the government could not appoint them right away as forest inspectors due to budgetary problems. However, the French experts always stressed the urgent need of an educated staff for the Forest Administration, because they were considered to be the pillars of government's policy for protecting and developing Ottoman forests. Nonetheless, their appointments remained delayed until 1867-68, when ten more students graduated from the school.⁴¹⁹ Students trained in this school formed the initial core of forest administration set up in 1869.

The Council of State issued a special regulation for the Forest School in 1870, which was drafted by one of the French experts, Charles Louis François Simon (1831-1911).⁴²⁰ The curriculum of this school was indeed very modern. The courses taught comprised of mathematics, topography and cartography, agriculture, forest economics, silviculture and *aménagement*, physics, chemistry, French, and Ottoman Turkish. Tassy and other experts also arranged field trips to Belgrade

⁴¹⁷ Bricogne, *Ormancılık Heyeti*, p. 5. Even writing this book in 1876-77, Bricogne says that it was still problematic and it could not be settled down.

⁴¹⁸ Louis Tassy, *Restauration et conservation des terrains en montagne, loi du 4 avril, 1882* (Paris,: J. Rothschild, 1883). Cited in: *Türk Ziraat Tarihine Bir Bakış*, p. 195.

⁴¹⁹ Between 1857 and 1878, 58 students graduated from the Forest School. In 1880, the forest school was combined with the mines school, making the Orman ve Ma'adin Mektebi. This school survived until the establishment of the Halkalı Forest School in 1893. There were 113 graduates of these two schools. In 1903, the *Halkalı Ormancılık Mekteb-i Âlisi* was founded, which continued until 1909. Forty-five students graduated from this school. Yund, "100 Yıllık Türk Ormancılık Öğretimine Bakış," p. 22.

⁴²⁰ For the text of this Regulation, see: "Orman Mektebi Nizamnamesi," *Düstûr* 1. Tertib, vol. II (11 L 1286/13 January 1870).

Forest and to Elmadağ for practical training and for extending students' knowledge and experience on modern forestry principles.

3.4. 'French Mission' and Its Impacts on Forestry

The Crimean War and the Treaty of Paris signified the growing French political as well as cultural influence. To understand the endeavor of the French scientists within the Ottoman Empire, we are to consider the moral, intellectual, technical, and ideological contexts of the second half of the nineteenth century. One question, for example, is about why the Ottoman government preferred French experts. The impact of French culture on the Ottoman society would not be a satisfactory answer. In fact, the Franco-Ottoman political relationship in the 1830s and 1840s was rather distanced. In 1830 France invaded Algeria, and during the Egyptian crisis she supported Kavalalı Mehmed Ali Paşa. Until the Crimean War, Ottoman ruling elite was rather suspicious about French political aims in the Middle East. It seems to be that French science in general enjoyed considerable respect among Ottoman governing circles. By this time French geographical sciences were developing rapidly and French central state was trying to enhance the impact of French scientific endeavor in international arena.⁴²¹

Besides scientific exchanges, there were also the French entrepreneurs, who took advantage of infrastructural developments in the Ottoman Empire. They might have been also influenced the minds of certain politicians by introducing novel ideas on public management. For example, Adolph Delaroux, a French forest

⁴²¹ Hefferman's study on French international science during the nineteenth century displays that political upheavals and flexibility in shifting official international policies and scientific pursuits had a crucial impact on the spread of knowledge globally. Michael J. Hefferman, "A State Scholarship: The Political Geography of French International Science During the Nineteenth Century," *Transactions of the Institute of British Geographers* 19, no. 1 (1994).

conservateur and contractor of the telegraph line between Edirne and Şumnu, presented a book on the fundamentals of reforestation and ‘good management’ of forests to the Minister of Trade, Namık Paşa in 1854. The minister praised Delaroux's fondness for forests and claimed that the book would be conducive for public interest.⁴²² However I did not come across any book written by this certain Delaroux. It seems that the book was a compilation of various writings on forestry which offers new techniques for the management of Ottoman forests.

The French forest experts introduced new concepts of forestry to the Ottoman Empire. They reformulated the principle of sustained yield for the management of Ottoman forests. The term silviculture, i.e. reforestation and afforestation, was unknown to the Ottomans before the arrival of the French experts. But there was an anxiety about the maintenance and improvement of forest lands already before 1857. The government used to send dispatches to the local officials stressing selective fellings in order not to disturb natural regeneration of trees. Also the government stressed the importance of replanting to supply future demands in almost every occasion. What really changed with the arrival of the French experts? It has been mainly the introduction of silviculture and *aménagement*, and even the stronger stress on ‘productivity’ and ‘durability’ in forestry.

3.4.1. Tassy’s Memorandum on Forest Exploitation

Tassy’s memorandum aptly summarizes the problems of Ottoman forestry and proposes a couple of solutions, which, he claimed, could temporarily solve not all but the basic problems of Ottoman forestry.⁴²³ Although there is no date on the

⁴²² BOA, *A. AMD.* 58/110 (1271/1854-5); BOA, *I. HR.* 5373 (29 Ş-2 R 1270/27-29 May 1854).

⁴²³ BOA, *I. DH.* 38044 (26 L 1282/14 March 1866), supplement 4.

memorandum, it was probably written around January-February 1866. He possibly penned this memorandum after completing his preliminary surveys.

Tassy begins by repeating the established belief on the Ottoman forests, stating that since the Empire still possessed immense forests, the public treasury could derive many advantages from them. He identified the major problem in the complexity of the property regime of forests. His solution to this problem was quite radical. He affirmed that the private forests,⁴²⁴ the village and town coppices, which the local people enjoyed from time immemorial, and finally forests, especially those in nobody's possession [*cibal-i mubaha*], were to be regarded as property of the State. Except for some reserved forests of the Navy, he claimed, none of these forests were seriously controlled. He added that the subjects of the empire exploited the forests mostly for the provisioning of cities, in particular that of the capital. Besides the local exploitations, he added, in certain localities, wood was the object of trade with foreign countries. For example, he gave the example of the timber of the Konya province from which the Greeks built most of their vessels.⁴²⁵

To rectify this situation and to turn the forests into the profit of the state—at least a part of these forests—he averred that it was necessary to organize an effective monitoring system, to prohibit any exploitation without preliminary authorization, to employ the graduates of the forestry school in the provinces, and finally to apply the Bill of 1861, adopted by the imperial decree on 3 November 1862.⁴²⁶

⁴²⁴ It is interesting to note that the translator interpreted Tassy's statement "*il y en a qui appartiennent à des particuliers*" as "*bazısı ahaliden şunun bunun taht-i tasarruflarında*". Ibid., supplement 2.

⁴²⁵ Ibid., supplement 4.

⁴²⁶ Considering the issue year of the Bill (1861), the date in the translation for this imperial decree, 3 T 1860, is wrong. Ibid., supplement 2. However, the statement on the adoption is quite interesting because there is no satisfactory proof on the promulgation of the Bill of 1861.

The remaining parts of the memorandum was on the working, management, and most importantly on the ‘commercialization’ of forests. Initially, the sales of the forests’ resources by partial concessions was to be limited to satisfy only the demands of the local trade. At the beginning, these concessions would undoubtedly be unproductive; but little by little, with the progress of the ‘administration and order’, he claims, the price of wood would rise and the demand would increase. Then important sales by auction could be achieved successfully.⁴²⁷

This means that only a gradual development of profits was expected from the forests of the empire. But, Tassy mentioned that this was perhaps the safest and most reliable method. However, he added, since construction timber was in high demand in Europe at the present time, the government was to appeal to foreign speculation, without waiting their demand. For these purpose, he proposed two alternative schemes:

- i. The long-term contracting of entire forests under the condition of cutting each year only a number of trees specified by the government. The contracting parties were to pay a fixed or proportional price for the volume of wood logged.
- ii. The offering to the speculators a certain number of trees, marked and estimated beforehand by the government officials, by means of a price which would be determined by an auction or fixed by amicable agreement. The contractors would be granted enough time, compatible with the quantity of sold timber, for their exploitations.⁴²⁸

First of these schemes required lengthy and costly surveys; because it was a delicate and complicated work, which needed to determine the amount of annual exploitation in a forest without endangering its durability. The second, on the other hand, could be set in motion much more promptly and necessitated minimum

⁴²⁷ Ibid., supplement 4.

⁴²⁸ Ibid., supplement 4, p. 2.

expenses. However, the government was to guarantee to the contractors that the provisions of the Forest Bill would be applied and that the wood which would have been sold to them would not be diverted of its destination.

Tassy indicated out the most suitable forests susceptible to immediate exploitation. For example, the forests in Bosnia and in the province of the Danube, on the edges of Karasu (Struma) in Thessaloniki, on the Kazdağı (Mount Ida) and on the coast between Dardanelles and Tekirdağı, in Konya and on the edges of the Black Sea between Sinop and Samsun were likely to be exploited with profit following the information which were collected during the surveys. In total, it was possible to cut one million trees from these forests, without impoverishing their regeneration. He calculated that if these one million trees were sold at a rate of five francs per tree, though a low value considering the quality of trees, the total five millions francs (about 21,750,000 *guruş*) would be very important for the administration of forests and for the future exploitation of the land resources of the Empire on a greater scale.⁴²⁹

Tassy indicated that the government would constitute commissions, consisting of French experts and graduates of the forestry school and entrust them the operation of surveying and marking of trees in these six regions in collaboration with the local administrations. By the time of the writing of the memorandum, there were already one graduate of the forestry school in Bosnia and three experts in the Danubian province. Tassy offered the invitation of a group of French experts to direct the surveys in the remaining four regions. He stated that if the surveys commenced at the beginning of April, these commissions could hammer 50,000 to 60,000 trees each, which would make a total of 250,000 to 300,000 in one year. The central administration, then, would control and discuss the findings of the commissions and after its approval, would publish the species to be tendered, accompanied with the Forest Bill in the principal European newspapers as an

⁴²⁹ Ibid., supplement 4, p. 3.

official invitation to foreign speculators.⁴³⁰ In fact, before the end of the regular surveys, the Ottoman government publicized its contemplation to confide the working of the state mines and forests to the hands of private contractors in December 1866.⁴³¹

The annual costs of these undertakings were estimated by Tassy as follows: 64,000 francs for the four French forest inspectors (*garde général*) (16,000 francs for each, including the transport charges from France to Istanbul; 32,000 francs for four associate inspectors (*gardes généraux adjoints*) (8,000 francs for each); 10,000 francs for expenses of hammers and other instruments; 5,000 francs for workers; 3,000 francs for office expenses; and finally 50,000 francs for traveling and operational expenses of the commissions on the spot, making in total 164,000 francs (about 710,000 *guruş*).

As is seen from the memorandum, the proposals for exploitation mainly stressed the commercialization of forest assets. Tassy did not mention any precepts about the methods of *aménagement* and silviculture. This is understandable for the moment because of the monetary difficulties that the experts were faced with during their stay in the Ottoman Empire. The sketch of the initial ‘budget’ that Tassy drew was quite high considering the financial conditions of the Empire. More than 60 percent of this budget was reserved for the salaries of inspectors and payments to the workers. This displays, in fact, Tassy’s avidness for the measures to be taken to improve the situation of the forest inspectors, from the point of view of the allowances paid. For the graduates of forestry school, he alluded to the salaries, but did not mention amounts.⁴³²

⁴³⁰ Ibid., supplement 4, p. 5.

⁴³¹ “Turkey,” *The Times*, 14 December 1866, Issue 25681.

⁴³² BOA, *I. DH. 38044*, supplement 4, p. 5. The same avidness can be seen in the report he delivered to the members of the Commission charged to modify the forest service in France on 30 March 1878. For this report, see: Louis Tassy, *Réorganisation du service forestier: première lettre* (Paris: J. Rothschild, 1879).

Until the commencement of the surveys, the central government and the provincial administrative officials remained unaware of forest assets in the Ottoman provinces. The General Probe in 1851 had failed because the information provided by local authorities lacked any useful data.⁴³³ Thus it were the French forest experts who undertook comprehensive surveys. For about eight months between 1866 and 1867 these surveys continued successfully. Bricogne said that they substantiated the reports on the distribution of forests of the Empire with sketches and maps, though there are few of them in the archival documents. These reports displayed that there were still considerably extensive forest wealth in terms of both area and produce.⁴³⁴

3.4.2. Forest Surveys and Extent of Ottoman Forests

To produce a scientific forest management, two major investigations had to be carried out. First, the location and extent of the forests needed to be determined to produce a workable inventory, and second, the volume of timber and its rate of growth or depletion needed to be calculated.⁴³⁵ A workable inventory was a precondition in determining the mass volume of timber and its dynamics. It required a detailed surveying and mapping of forest areas. In the Ottoman case, however, the measurement of forest lands always remained approximate, even until the 1910s. The vague area estimates of Ottoman forests did not say much about its productive and commercial capacities nor about the amount of timber, fuel wood and other forests products.

French forest experts, who traveled around large parts of Rumelia, Anatolia, Arabian provinces and Cyprus, were unable to interpret on these issues due to a

⁴³³ BOA, *A. MKT. NZD. 37/95*; BOA, *A. MKT. NZD. 44/109*.

⁴³⁴ Bricogne, *Ormancılık Heyeti*, p. 7.

⁴³⁵ Williams, *Deforesting the Earth*, p. 408.

lack of proper surveys. However they did stress that Ottoman forest resources would diminish rapidly in near future if exploiting forests continued at the current pace. For example, Louis Adolphe Ambroise Bricogne (1825-1905), who became the head of the French forest mission after Tassy, claimed that the forests of Bosnia were heavily exploited by the local populations, which threatened the regrowth of plantings. He observed that especially the good forests, which could provide high-quality timber, were maltreated more than others. Nevertheless, he added that though such kind of abuses was common to the Ottoman history, the Bosnian forests, thanks to the favorable climatic conditions and to its soil, were very suitable for the regrowth of trees, had less to suffer from the other provinces of the empire. For him, the causes of these maltreatments were the complete absence of *aménagement* and of surveillance, which left the forests open to the commercial speculations and the squandering of peasantry. Even though the same exploitations continued after the organization of the forest administration, Bricogne stated, the administration succeeded in regulating and making a greater part of the protected/preserved state forests more productive. By this way, the administration also marketed felled wood lying on the ground, which derived revenues for the imperial treasury.⁴³⁶

Such pessimistic remarks were a part of conservation rhetoric in almost every part of the world that practiced scientific forestry in the nineteenth century. At any rate they were effective in convincing some part of the administration, most importantly the religious establishment, to accept stricter control of the forests. Surveying, mapping, or producing a general cadastre, would help the government to better assess the size of forests. Such sporadic surveys (usually not supplemented with maps) installed an image of Ottoman forests as boundless in the minds of politicians and professional foresters before the semi-systematic forest surveys.

⁴³⁶ Bricogne, “Les fôrets de l’empire Ottoman,” p. 276.

As mentioned earlier, there was already a graduate of the forestry school sent to Bosnia, who had been charged with the marking of trees in this province. In the province of the Danube there were also three experts, who were also commissioned to hammer mercantile timber. Tassy proposed to send two inspectors summoned from France the forests on the banks of the Karasu accompanied by one of the graduates of the Forest School. In 1866, the French government sent four inspectors, namely Bricogne, Godchaux, Simon, and Chervau[x] and four head guards (*bekçibaşı*) to undertake further forest surveys.⁴³⁷ These people would stay in the Ottoman lands for one year, starting in 15 May 1866.⁴³⁸ This team formed four commissions: each commission consisted of one French specialist, one head guard and one Forestry School graduate. In September 1866 (four months after Tassy's proposed date), these commissions were sent to the forests of Bosnia, Thessaloniki (Thessaly and Macedonia), Çanakkale, and Konya-Karaman to survey, arrange, and parcel out cuttings in forests.⁴³⁹

These six commissions were accompanied in their explorations by certain local guides, who the local authorities appointed at their disposal. They made initial observations before fixing the forests, where the markings would take place. These forests were chosen among the closest to the ports of embarkment on the coastal regions. Then the surveyors marked with special hammers as many trees as possible, considering the conditions of the vegetation so as not to harm the sustainability of harvest. After the end of the surveys, the commissions prepared reports comprising information on:

⁴³⁷ BOA, *I. DH. 38044*.

⁴³⁸ However, in October 1867, the government applied to the French government to prolong the duration of service of two experts. BOA, *I. DH. 39497* (5 C 1284/4 October 1867).

⁴³⁹ Unfortunately, I could not find the instructions given to these commissions.

- the number of trees, their species and volume as firewood and timber,
- the expenses of exploitation according to the price of labor in the locality,
- the transport charges of the products according to the price of one cartload of timber, the distance of the port of embarkment, the conditions of paths and the expenditures to improve them,
- the expenses of loading and freight from the port of embarkment until the probable place of consumption,
- the prices of the products at the places of consumption.⁴⁴⁰

All these information was demanded to determine the standing value of trees. Here again we see the same commercial concern of the central administration. The French experts' reports mentioned clearly forests containing valuable tree species, such as oak, pine, and fir. Other things being equal, density of tree cover and quality of wood were important to classify a forest as commercially valuable.⁴⁴¹

The French experts were sent to prepare surveys also in Thessaly, Lesbos, Gallipoli and Çanakkale. To train the less-experienced graduates of the forestry school, Tassy did the survey of the Belgrade forests in Istanbul. At the same time, these experts also made preliminary surveys in other forest lands of Anatolia, such as, Kastamonu, Trabzon, Sinop, Canik and Samsun, even Aleppo and Damascus.⁴⁴² Tassy and Sthème surveyed the Elekdağı and other forests around Sinop as well as Bursa themselves.⁴⁴³ Their estimations in the forests of Biga, of which the total area

⁴⁴⁰ BOA, *I. DH. 38044*, supplement 4.

⁴⁴¹ Bricogne, "Les fôrets de l'empire Ottoman," passim; Bricogne, "Les fôrets de l'empire Ottoman," passim.

⁴⁴² For more details, see: Bricogne, "Les fôrets de l'empire Ottoman," pp. 321-35; Bricogne, *Ormançılık Heyeti*, pp. 77-130.

⁴⁴³ Bricogne, *Ormançılık Heyeti*, p. 6.

was estimated to be about 200,000 hectares; was too low, because only the forest of Elekdağı was nearly 57,600 hectares.⁴⁴⁴

Between 1857 and 1876, French experts did especially focus on surveying European lands of the empire (Bulgaria, Bosnia-Herzegovina, Thessaly, and Macedonia) as well as the Prince Islands, except for a few forests in Anatolia mentioned above. The reason for this focus was connected with the fact that wood and timber of the Balkan forests were more marketable, especially to Europe. In 1864, Tassy sent one of his students to supervise the timber sales in Bosnia, and in 1865 he organized a committee, consisting of three members, to survey and to prepare provisory management plans for the forests in Bulgaria.⁴⁴⁵

Initial surveys displayed that revenues of forests were unknown, or if known they were not publicized. Furthermore, the experts propagated that even ‘primitive’ measures of protection could not be applied and thus the forests were haphazardly ruined by local people. The surveys was launched by carrying out inquiries among peasants, who were living nearby forests. However, scattered settlements caused physical obstacles and peasants were distrustful of the questions of experts and hid information from them. Thus, the commissions immediately changed their prearranged routes and run into remote spots of forests.⁴⁴⁶ Bricogne claims that the local authorities were unaware of forest assets within their regions and information taken from them had no quantitative or qualitative value. But, this judgment was partly wrong. For example, when the Ministry of Trade and Finances asked the governor of Midilli that a forest engineer (one of the new graduate of the forest school) was going to be sent in order to make a scientific and technical survey and control the *miri* forests belonging to the Shipyard –in order to prevent the destruction of forests of Midilli and to protect them in accordance with the Forest

⁴⁴⁴ Cuinet, *La turquie d’asie*, vol. V, p. 285.

⁴⁴⁵ Bricogne, *Ormancılık Heyeti*, pp. 6-7.

⁴⁴⁶ *Ibid.*, p. 7.

Bill– within one and a half month, and to execute provisional measures, the governor gave some valuable information on the forest utilization in the island. The governor, in fact, was inquired about the condition of pine forests on the island. He replied that though these forests belonged to the Shipyard, the peasants grabbed many sections and turned them to olive groves and fields. The governor also reported that the islanders haphazardly cut and sold trees and produced tar without a serious control. Also shepherds burned forests to convert them to meadows for their animal herds. Beside these, it was reported that there were also a lot of fires ignited by the local people.⁴⁴⁷

Within this short period, Bricogne avows that they could be able to substantiate the distribution of forests lands by sketching and mapping. This documentation, he claims, revealed that there were still extensive forest wealth in terms of area and yield. These commissions analyzed the state of the forests to determine the extent of administrative reforms. The early observations from these surveys varied from region to region. The experts claimed that there were extensive felling in all forests, for which they advised the government to employ special guards and gendarmerie. Further, they emphasized the necessity of a well-defined state ownership because of unclear boundaries. In fact, before the enactment of the Forest Regulation, the government had already proclaimed that forests belonged to the state. Thus, the surveys of these commissions, their written accounts, maps or sketches are useful to take a snapshot of the anatomy of forests in the Empire. Unfortunately, the French teams of experts surveyed only the forests belonging to the state. The details that they provided would but help to understand the conditions, the types of use, and the acreages of forest in the Ottoman Empire. The survey reports also provided very valuable information on the natural vegetation

⁴⁴⁷ BOA, *A. MKT. MVL. 132/26* (10 Ra 1278/15 September 1861).

and the destination of the forest products to consumption and commercial centers.⁴⁴⁸

According to the calculations in these earliest surveys, the total forest surface of state forests in Asia Minor, the Aegean Islands, and the Balkans were 4,434,000 hectares. Of these 2,999,000 hectares of forests (67.6 percent) was found in Anatolia and the Aegean Islands and 1,435,000 hectares of forests (32.4 percent), whereof about three-seventh were in Bosnia and Herzegovina, was in the Balkans, including Thrace. For Anatolia, more than one-fourth of the total forest area was in Kastamonu and a little less than one-fourth situated in Trabzon and Samsun. Excluded from these surveys were the forests in Serbia, Moldavia, and Wallachia in the Balkans, Hicaz and Yemen in the Middle East, and all the Aegean Islands, except for Lesbos and Rhodes.

The total population of the surveyed regions, according to Ritter's estimates in 1877, was 16,096,937. The total population of the Ottoman Empire, except for the regions mentioned above, was estimated to be approximately 21,7 millions, of which about 8,7 millions was in the Balkans.⁴⁴⁹ Thus, the hectares of forest per head was 0.17 hectares in the Balkans and 0.23 hectares in Anatolia (see Table 6). Naturally, these figures and calculations did not reflect the reality about the forests in this period, since private and *vakıf* forests and communal forests were not included within the category of state forests. More reliable figures were compiled during the late nineteenth and early twentieth centuries, which will be provided in Chapter 5.

⁴⁴⁸ See Appendix 1 for a brief depiction of the condition, distribution, and use of forest resources in the Balkans based on the information provided by: Bricogne, "Les fôrets de l'empire Ottoman."

⁴⁴⁹ Behar, *Osmanlı İmparatorluğu'nun ve Türkiye'nin Nüfusu*, p. 38.

Table 6: State forests as surveyed by the French forest experts, c. 1868.

	Population ¹	Forest in Hectares	Proportion of forests in total forest area	Hectares of forest per head
Europe				
Bosnia	1,242,456	600,000	13.53	0.48
Upper Bosnia		300,000		
Lower Bosnia		200,000		
Herzegovina		100,000		
The Danube	2,016,430	300,000	6.77	0.15
Edirne	1,304,352	225,000	5.07	0.17
Thessaloniki	1,237,338	232,000	5.23	0.19
Prizren	1,199,154	28,000	0.63	0.02
Istanbul	685,200	50,000	1.13	0.07
<i>Subtotal</i>	<i>7,684,930</i>	<i>1,435,000</i>	<i>32.36</i>	<i>0.19</i>
Asia Minor and Aegean Islands				
Trabzon	937,700	520,000	11.73	0.55
Canik		180,000		
Kastamonu	774,212	785,000	17.70	1.01
Istanbul (Izmid)	796,000	200,000	4.51	0.25
Hüdavendigâr	1,030,244	455,000	10.26	0.44
Biga ²	110,000	180,000	4.06	1.64
Aegean Islands ³	118,000	75,000	1.69	0.64
Aydın	980,000	80,000	1.80	0.08
Konya	800,172	165,000	3.72	0.21
Adana	324,062	130,000	2.93	0.40
Cyprus	144,000	100,000	2.26	0.69
Aleppo	539,311	21,000	0.47	0.04
Damascus (Syria)	973,120	18,000	0.41	0.02
Erzurum	885,186	90,000	2.03	0.10
<i>Subtotal</i>	<i>8,412,007</i>	<i>2,999,000</i>	<i>67.64</i>	<i>0.36</i>
Total	16,096,937	4434000	100.00	0.28

Source: after Bricogne, *Orman Heyeti*, p. 131.

¹ Behar, p. 38 based on Ritter 1877.

² Biga, estimated from 1881-1893 census.

³ Only Lesbos and Rhodes were surveyed. Population estimates belong to 1844. Behar p. 27.

The French experts also calculated the would-be gains from managing the forests at the expense of minimum costs in their survey reports. These reports then became the backbones of administrative memoranda. They revealed that if the existing destructions continued as it were, local inhabitants and the central treasury would suffer considerable losses in the very near future. This remark was remained to be the rhetoric of the Ottoman forest administration until the end of the Empire. According to Bricogne, the two major causes of the forest depletion were: 1) the uprooted destructive mentality of local people; and 2) the inefficient commercial networks and the ‘archaic’ trade system. The immediate solution was to establish a

para-military police force to protect the forests from the destructions of local people.⁴⁵⁰ It seems that all these conditions necessitated special rules and regulations and mechanisms for the application of these rules and regulations. There was also an urgent need for trained personnel to put methods of management and protection into practice that were essential for the amelioration of forests.

3.4.3. *Cahier des Charges* of Forests

Similar to the *Cahier des Charges* for the railway constructions (see Chapter 5), the Council also published a *Cahier des Charges* for the forests together with the Bill of 1861. The government decided that the timber in the forests of the Ottoman Empire would be sold to the customers in a proper manner on July 1860. For this aim, a final prototype sales contract, which would include the prime conditions given by the Ottoman government, was demanded from the forest experts. The government hastened because of the insistent British demand for cutting timber from Ottoman forests. It was thought that this sales contract would be useful to protect the Ottoman government from some further political and administrative threats.⁴⁵¹

The politicians legitimized this demand of the British by claiming that they did the same in some other state's forests. The ambassador Henry Bulwer suggested for a negotiation meeting on this issue. Upon this, a deliberative council of ministers convened to discuss the British demand. In this meeting, the council stated that though there were extensive forests in the Empire, the forests remote to the coastal regions were naturally protected due to a lack of effective communication. On the other hand, the forests on the coastal regions where

⁴⁵⁰ Bricogne, *Ormançılık Heyeti*, p. 8.

⁴⁵¹ BOA, *A. MKT. MHM. 188/17* (27 Z 1276/16 July 1860).

transportation was easier, had been exploited until now, but it had not been possible to reforest these lands since. Thus, they stated, the Empire could not have benefited from an important source of revenue. Although there were attempts to teach scientific forestry in the Empire and to codify rules and regulations, in practice these efforts were hindered due to monetary investments that could not be realized. For these reasons, the council accepted Bulwer's suggestion, provided that the forests should be elected among the ones that the Ottoman state had not been directly utilizing. The British also should not demand to cut trees from the forests belonging to local people. Moreover, the British was expected to replant trees as well as to build roads after the end of fellings. Thus the council concluded that all these would be beneficial to the Ottoman Empire once they were included in the contract made with the British government. By this way, the fears about the sovereign rights of the Ottoman state would also be satisfied.⁴⁵²

On 13 July 1861, a draft specifications, consisting of 38 articles, was issued by the Council of Tanzimat for regulating forest concessions.⁴⁵³ The specifications (*şartname*, or *cahier des charges*) defined the terms and conditions set by the government to grant a tax farm (*iltizam*), or a contract (*ta'ahhüd*), or a concession (*imtiyaz*) to a person or a company. The government designed these specifications as part of the sales contracts (*mukavele*). They defined the administrative, technical, and financial obligations and provisions, the methods of extraction of forest produce, the privileges and sanctions laid before the concessionaires and dealers. The *Cahier des Charges* set forth also the completion periods of the contracts, the materials to be used during the loggings, and the conditions for the retention and reimbursement of the caution money. Finally, the last section of the

⁴⁵² BOA, A. AMD. 92/58 (17 Za 1276/6 June 1860).

⁴⁵³ "İltizam ya Ta'ahhüd veya Bir İmtiyaz Hasebiyle Miri Ormanlarından Ağaç Kat'ına Me'zun Olanların Mu'amelatı Hakkında Şartname Layıhası" BOA, I. DH. 33929.

specification contained the rules and methods for the supply of the Imperial Shipyard's timber.⁴⁵⁴

The administration sold timber either by way of a tender, or through sale by auctions. But the provisions did not say much about the conditions on the sales by auction. On the other hand, the administration inclined to determine the prices of trees to be contracted in response to a demand, which is called the 'quoted price'. Later in 1865/66, the government held sales by auction as well. But for some technical and procedural reasons, it postponed this practice for the time being. There were three types of contracts to be arranged between the concessionaires and the forest administration:

1. by the quoted price (*bedel-i muayyen*) per tree,
2. by the wholesale contract of a definite forest cutting (*makta'*),
3. by the price of timber determined through the species and quantity, measured by cubic meters.⁴⁵⁵

The forest contracted in return for a quoted price (per tree) would be exempted from the customs duty and other taxes. However, if the forest tracts were situated in a region where the tax revenues were farmed out, the contractors were obliged to pay the necessary taxes for the trees that would be logged to the tax farmers. In this case, the condition of the forests tracts was to be written specifically in the contracts.⁴⁵⁶

⁴⁵⁴ Ibid.

⁴⁵⁵ Ibid.

⁴⁵⁶ Ibid.

3.5. Evolution and Structure of the Forest Administration

For the supervision and exploitation of forests, a new administration based on utilitarian principles was needed. The forest administration was just that utilitarian administrative system, in which strict attention to rules and procedures was mandatory.⁴⁵⁷ The clearest definition of the early forest administration was drafted in the Bill of 1861, which required that every category of officials fulfill their duties according to a formal system of rules and procedures and a disciplinary system of inspection.⁴⁵⁸ At the beginning, the French experts were in charge of entire forestry matters on behalf of the Council of Public Works. They established a preliminary forest administration, which reorganized in different times until the end of the nineteenth century. After the students of Tassy and Stheme graduated from the Forest School, they joined the French experts becoming the first forest inspectors of the Ottoman Empire. There were also a certain number of mounted and foot guards in charge of affairs. According to the first plan, these inspectors and guards would wear a special uniform, bearing a special mark on its neck. However, this measure could only be put in force around 1868. At the apex of the organization was the Minister of Trade, who was responsible from appointing and dismissing forest officials, but in consultation with the Council of Public Works. The minister also conferred with the Council on the numbers and place of residences of officials and the boundaries of their administrative jurisdiction.⁴⁵⁹ On the other hand, provincial governor-generals were given the authority to discharge forest inspectors from office when they felt necessary, whereas inspectors could dismiss forest guards

⁴⁵⁷ For an analysis of this Benthamite utilitarian administrative system in the Indian forest service, see: Kevin Hannam, "Utilitarianism and the Identity of the Indian Forest Service," *Environment and History* 6 (2000).

⁴⁵⁸ BOA, I. DH. 33929.

⁴⁵⁹ Ibid.

temporarily before informing the central forest administration about the reasons of their dismissal.⁴⁶⁰ It is obvious that the forest administration pattern was highly hierarchical. However, the real burden of administration was placed on the shoulders of inspectors and guards.

Forest inspectors and guards were at the base of the hierarchy, whose jobs were comprised of the protection and management of forests. Inspectors were to be elected among the graduates of the Forest School. Salaries of officials were fixed in accordance with the level in hierarchy. The office of inspectorship was divided into three categories. The monthly salary of the first category inspectors determined to be 3000 *guruş*. Second and third category inspectors would receive 2500 and 2000 *guruş* respectively. In addition, each inspector would also be paid 2000 *guruş* for the leveling equipments at the beginning of his office.⁴⁶¹ These proposed salaries were considerably high in comparison to the inspectors of education, who were sent to examine schools in Damascus, Tripoli, and Aleppo as well as in the Aegean Islands, Cyprus, and western Anatolia. These inspectors received a monthly salary of 1750 *guruş* and a travel allowance of 6500 *guruş* in 1865.⁴⁶²

In terms of ranking, the first category of inspectors would be at the bureaucratic level of third rank (*rütbe-i salise*), whereas the remaining inspectors would be considered to be at the fourth rank (*rütbe-i rabia*).⁴⁶³ Regarding the bureaucratic organization, which consisted of five ranks in total, the rank of the second and third category inspectors corresponded to a lower level in the hierarchy. But it was possible to promote on the basis of seniority and merit.

⁴⁶⁰ Ibid.

⁴⁶¹ Ibid., Article 7.

⁴⁶² Selçuk Akşin Somel, *The Modernization of Public Education in the Ottoman Empire, 1839-1908: Islamization, Autocracy, and Discipline* (Leiden and Boston: Brill, 2001), p. 80.

⁴⁶³ BOA, I. DH. 33929, Article 8.

Forest inspectors directly communicated with the Council (*Meclis-i Me'abir*) about matters and problems that were not specified in the Bill. The aim was to make inspectors fully accountable to the Council by demanding them to keep detailed records and accounts and to submit reports of matters and problems that they encountered in the localities. For example, the inspectors were to keep three kinds of registers (*defter*). The first register included the correspondences received each day, dates, and summaries of every dispatch and the title deeds they have drawn up. The second one included dates and terms of felling licenses, the names of officials who gave the license, the names of contractors (*mültezim*) and the names of the forest and its district; the amount and species of logged trees and their removal date from the forest as well as the determined fees. The last register included the names and places of residence of persons acting in opposition to the rules and regulations, the dates of the trials against such offenders and the penalties that were to be paid by these offenders. Apart from these *defters*, the inspectors were to keep the copies of all documents and to categorize them into corresponding bags for sending them to the center when demanded.⁴⁶⁴

The mounted and foot guards were elected from among the former members of military service, being younger than fifty years of age as far as possible, and to serve under the jurisdiction of the forest inspectors. Their initial salaries were fixed in accordance with the level of responsibility. The foot guards would be paid 200 to 300 *guruş* according to the region of service. The mounted guards, on the other hand, would receive at least 600 *guruş* monthly salary. Each foot guard would be responsible from the supervision of a forest tract, composed of approximately 8000 *dönüms*, and as a rule, they were to reside close to the forest. On the other hand, special forest tracts would be under the surveillance of mounted guards who would supervise the services and duties of foot guards. At least two and at most six foot guards would be under the authority of each mounted guard, which means they

⁴⁶⁴ Ibid.

were to superficially supervise forest tracts ranging from 16,000 to 48,000 *dönüms*. They were to be literate persons in order to superintend offenses against the rules and regulations and to report them directly to the inspectors. Each mounted guard was to keep one register, in which he were to record incoming orders, outgoing warnings he sent to his subordinates, and other investigated matters and reports that they sent to inspectors.⁴⁶⁵ This quite sophisticated structure was not realistic for the time being, at least because of the proposed number of forest guards. If the administration put into practice the provisions of the Bill, there would be at least 725 and at most 1,000 guards in the service. As can be seen in the Tables 7 and 8 below, the administration could only come closer to these numbers at the turn of the century.

The head of the French forest mission, Louis Tassy, who struggled to convince the government for the necessity of establishing a institution over the years, returned France in 1868. However, there were still three French experts operating within Empire at the end of 1869. On December 1869, the Ottoman government requested three more experts-engineers from the French government. Meanwhile, Bricogne was appointed to the office of head engineer instead of Tassy. On the other hand, Osman Efendi, one of the first graduates of the forestry school, was nominated to be the first forest inspector of Istanbul and its environs. The government appointed the other graduates of Forest School, who accompanied the French experts during the surveys, to the surveyed provinces as inspectors. These eight inspectors, then, constituted the nucleus of the local forest administration. After these appointments, the Forest Administration was established officially, consisting of a general director, a forest council and a secretary, under the jurisdiction of the Ministry of Finances. Bedros Kuyumciyan, a member of the

⁴⁶⁵ Ibid., Article 10-14.

Council of State, became the first General Director of Forests.⁴⁶⁶ This body was mainly in charge of preparing a budget of the administration, accelerating the establishment of local branches, and applying the Regulation in the localities until 1876.

Bedros Kuyumciyan proposed a budget to the Minister of Finances, Sadık Paşa, which corresponded to 2,587,422 *guruş* in total and composed of chiefly the institutional expenses and officials' salaries. The initial official cadre, except for the central bureau, consisted of 29 foresters, 64 mounted guards, and 186 foot guards and a couple of scribes.⁴⁶⁷ In 1873, the Forest Administration applied the government to recruit new officials and to increase the salaries of existing ones.⁴⁶⁸ Also, with the personal efforts of Yusuf Bey, the General Director of Forests Administration and former Minister of Finances, the government increased the budget of the Forest Administration to 8,084,886 *guruş*, nearly three times higher than the earlier allocation.⁴⁶⁹ However, considering the amount that was proposed to be allocated for the working of mines and exploitation of forests in the budget report of Âli Paşa in 1862, both of these amounts were quite low.⁴⁷⁰

⁴⁶⁶ BOA, *I. DH. 42127* (22 N 1286/26 December 1869). Bricogne says that Aristidi Baltacı became the first director. Bricogne, *Ormanlık Heyeti*, p. 11. However, it seems that either his term of office was very short-lived, or, as Yund states, he was the head of the forest council, which was probably established shortly after the depart of Tassy. Kerim Yund, *Türkiye Orman Umum Müdürleri Albümü* (İstanbul: Hüsniyat Matbaası, 1959). Yet it is not possible to find any information on Baltacı's office in the archival documents.

⁴⁶⁷ Yund, *Orman Umum Müdürleri*, p. 11.

⁴⁶⁸ BOA, *A. MKT. MHM. 463/72* (19 B 1290/12 September 1873).

⁴⁶⁹ Yund, *Orman Umum Müdürleri*, p. 18.

⁴⁷⁰ In this report, Âli Paşa stated that about 15 millions *guruş*, which could be taken from the capital required for the extinction of the debt, required for the working and proper administration of the mines and forests. By this way, these resources would produce at once large returns, which could be increased more in future. The English translation of this report by the dragoman of the Imperial Divan, Arifi Bey can be found in: "Turkish Finance," *The Times*, 22 March 1862, Issue 24200.

The real change in the administration came with an instructions published in early 1876. This “Instructions on the Organization and the Duties of the Forest Administration,” put into craft on 19 March 1876,⁴⁷¹ for the first time stipulated a forest administration in the real sense. Accordingly, the Forest Administration was attached to the General Directorate of Forests and Mines (*Orman ve Ma'adin İdare-i Umumiyyesi*), under the authority of the Ministry of Finances. It consisted of the general (*umumi*) and control inspectors, in addition to assistant (*muavin*) inspectors of provinces (*vilayet*), subprovinces (*sancak*), and districts (*kaza*). They were assisted, in turn, by officials either receiving salaries (*muvazzaf*) or ten percent commissions (*ondalık*), secretaries and mounted and foot guards. The inspector-generals were the natural members of the Forest Council (*Orman Meclisi*). Forests in the provinces were grouped into four regions, each being under the jurisdiction of an inspector-general residing in Istanbul. These four sections were then divided into provinces, where inspectors were responsible. There were to be one head inspector in each province and sometimes one assistant inspector could be in their retinue. Inspector-generals in Istanbul were to carry out regular inspections (120 days a year) in their respective regions. However, under normal conditions, they resided in Istanbul. For the investigations, their area of jurisdiction were divided into four regions: 1) Istanbul and its surroundings, Edirne, the Danube with Tırhala (Triccala), Thessaloniki and Manastir environs, 2) Bosnia, İşkodra (in Albania), Yanya (Janina), and Prizren, 3) Trabzon and Kastamonu with Canik, Erzurum, Sivas, Ankara and Hüdavendigâr (Bursa), 4) the Aegean Islands (Cezair-i Bahr-i Sefid), Aydın, Konya, Adana and Syria.⁴⁷²

⁴⁷¹ For a detail of the instructions given to all these inspector and officials, see: “Bi'l-Cümle Orman Memurlarının Suret-i Tertib ve Veza'ifine Da'ir 51 Maddelik Talimat,” *Düstûr* 2. Tertib, vol. IV (7 Mart 1292/19 March 1876). *Takvim-i Vakayi*, no. 1843, 14 L 1293/2 November 1876.

⁴⁷² “Orman Memurlarının Suret-i Tertib ve Veza'ifine Da'ir Ta'lîmat.”

The inspectors of the provinces were expected to serve in the center of the province, to be assisted by a secretary and if necessary helped by an assistant inspector. On the other hand the inspectors of the subprovinces functioned in their respective regions and were served only by a secretary. In each district, there were one official and one secretary supported by sufficient numbers of mounted and forest guards settled in forests of towns and villages. In Istanbul, the control inspectors functioned within the Wood Customs (*Kereste Gümrüğü*), but there were additional customs officials and guards in Istanbul, Edirne and Bursa. In other regions, their functions were handled by local forest officials. The presence of the administration in the local provinces was important to supervise transactions and collection of taxes, loggings and to practice silviculture and *aménagement*. The most efficient way of getting information from the local regions was the telegram. It seems that the Forest Administration was one of the ablest users of this service, especially after the 1880s.⁴⁷³

After the spread of officials to local regions, the forests within their jurisdiction brought more and more into the gaze of the state. With the agency of these officials, the central government adopted a sort of standardized management and administration over empire's forests.

⁴⁷³ Especially see: *Muharrerat-ı Umumiyye Fihristi*, (İstanbul: Orman ve Ma'adin ve Zira'at Nezareti, 1319 [c. 1901/02]).

Table 7: Categories and number of forest officials in provinces and subprovinces, 1890 and 1897.

Provinces	Director		Inspector		Assistant Inspector		Secretary		Controller		Mounted Guards		Scriber of Receipts		Foot Guards		Ondalık Officials		Total	
	1890	1897	1890	1897	1890	1897	1890	1897	1890	1897	1890	1897	1890	1897	1890	1897	1890	1897	1890	1897
Adana			3	4	1	1	3	3			9	11		4	30	30		23	46	76
Aegean Islands			1	1			1	1			2	3	2	1				12	6	18
Aleppo			1	1			1	1			2	2	2	2	6	6		11	12	23
Ankara			1	1	1	1	0	1			2	4			6	13		23	10	43
Aydın		1	3	5	1	1	3	8		2	17	26		15	45	84		33	69	175
Biga w. Karesi			3	2	1	1	3	2			10	6	14	6	41	24		16	72	57
Bursa			3	3	1	1	3	4			12	13	2	2	21	23		49	42	95
Çatalca			1	1	1		1	1			6	6	4	4	19	19		13	32	44
Edirne		1	4	4	1	1	5	3			16	15	2	2	28	32		40	56	98
Erzurum			1	1		1	1	1			3	7		3	3	21			8	34
Işkodra			2	2			1	1			1	1	1	1	6	6		2	11	13
Izmid			2	2	1	1	2	3			14	13	11	12	21	20		31	51	82
Jerusalem																				
Kastamonu			5	5	1	1	5	5			19	19	11	12	47	55		40	88	137
Konya			2	7	1	1	3	4			16	24	5	16	33	39		5	60	96
Kosova			1	1	1		1	1			5	6			18	18		27	26	53
Mamuretü'l-aziz																				
Manastir			1	2	1	1	1	1			5	6			16	21		17	24	48
Sivas			1	1			1	1			2	2	1	1	6	6		26	11	37
Syria and Beirut			1	2			1	2			3	5	3	3	9	12		16	17	40
Thessaloniki			3	2	1	1	3	2		1	10	9	6	6	50	47		28	73	96
Trabzon			2	2			2	2			8	8	13	14	17	18		28	42	72
Janina																				
Zor sancağı																				
Other				2				2				4		8		21		9		46
Total	0	2	41	51	13	12	41	49	0	3	162	190	77	112	422	515	0	449	756	1,383

Source: after Y. PRK. OMZ. 1/33 (29 B 1308/10 March 1891) and Güran, 1897 İstatistik Yıllığı, p. 181.

Table 8: Categories and number of forest officials in provinces and subprovinces, 1910.

Provinces	Director	Inspector	Assistant Inspector	Secretary	Registrar	Official of Transactions	Controller and Tax Collector	Surveyor	Cartographer	Watcher	Mounted Guards	Foot Guards	Office-keepers	Total
Adana	1	2		4		16	22	20		96			1	162
Aegean Islands						1	2							3
Aleppo		1		1			2				2	6		12
Ankara		1	1	1				1			7	27		38
Aydın	1	3		6		42	37	24	5	189			1	308
Biga														0
Bursa		5	1	6			11	1			20	35		79
Çatalca	1			2		1	12			13			1	30
Edirne	1	1		3		31	24	5		78			1	144
Erzurum		1	1	1			2				4	23		32
Işkodra)	1	1		2		7	4	2		30			1	48
Izmid	1	1		2		6	32	2		61			1	106
Karesi		2		3			2	2			10	21		40
Kastamonu	1	3		5		13	50	25	5	170			1	273
Konya		6	1	8			15	1			25	62		118
Kosova		2		1		10	11	10			4	96		134
Manastir		3		3		5	10	6			4	101	1	133
Sivas		1		1							6	9		17
Syria		1		1			1				5	7		15
Thessaloniki	1	5		6		26	55	29	5	306			1	434
Trabzon		1	1	1			7				5	14		29
Baghdad						2				8				10
Beirut		1		1			1				1	5		9
Bingazi										2				2
Bolu	1	2		5		9	41	17		127			1	203
Canik		1		1			8				4	8		22
Diyarbekr						1				3				4
Istanbul	1			1	1	5	17	2		16			1	44
Janina	1	1		3		20	3	11		63			1	103
Jerusalem							1							1
Kala-i sultaniyye		3		2			6				6	24		41
Musul				1		1				11				13
Van						1				3				4
Total	11	48	5	71	1	197	376	158	15	1176	103	438	12	2611

Source: *Orman ve Ma'adin ve Zira'at Nezareti 1326 Bütçesi.*

As is seen in the Table 7, there was 83 percent increase in the total number of officials between 1890 and 1897, making more than 11 percent average annual increase. On the other hand, the total number of officials increased to 2,611 in 1910, which makes a 89 percent increase, making about 7 percent annual increase, compared to the figures in 1897. In overall, the growth of number of officials was more than threefold between 1890 and 1910. Considering the total number of forest officials at the time of the creation of the Forest Administration in 1869, which was 279, the increase in the number of personnel and the diversification of appointments reflected the late nineteenth-century professionalization of Ottoman forest bureaucracy. The scope and function of bureaucracy represented also the Ottoman government's gradual enlargement of interventionist aims regarding the forests of the empire.

The figures provides also clues about the financial interests of the Ottoman government with respect to forest resources. Between 1890 and 1897, the main increase in number of officials was based mainly on the temporary employment of *ondalık* officials, who worked on a ten-percent commission at ports and railway stations. But the government fixed their salaries at most 400 *guruş*, which caused many improprieties in the collection of taxes. Thus, they were dismissed from office and replaced with permanent tax collectors in the 1900s. During this period, the government employed also surveyors, which showed a concern for registering forest lands, except for a few provinces, throughout the empire. The salaries paid to forest officials in general were much lower than the ones that was proposed in the Bill of 1861. Nonetheless, bulk of the budget was disbursed to forest officials each year. The below Table shows the minimum and maximum salaries of forest officials in 1908:

Table 9: Salaries of forest officials in 1908.

Name of Office	Salaries (<i>guruş</i>)	
	Minimum	Maximum
Director	1,500	3,000
Inspector	900	2,200
Cartographer	800	1,500
Surveyor	600	1,000
Assistant Inspector	540	540
Mounted Guard	400	550
Secretary	300	800
Official of Transactions	300	600
Controller and Tax		
Collector	200	450
Foot Guard	200	250
Registrar	200	200
Head watchman and		
watchman	150	300
Office-keeper	100	200

Source: *Orman ve Ma'adin ve Zira'at Nezareti 1326 Bütçesi*.

The directors and inspectors in Aydın and Thessaloniki received the highest salaries, which was 3,000 *guruş*, whereas the director in Çatalca earned only 1,000 *guruş*. The cartographers in Aydın also earned the top salary. Among these officials only the assistant inspectors received a fixed salary. It seems that all the remaining salaries were determined by seniority, since a secretary or a official of transactions could receive more salary than a mounted guard and an assistant inspector.

After the Russo-Ottoman War of 1878/79, the government attempted a retrenchment in the budget by lowering the salaries of officials, which worsened especially the economic conditions of local officials. Among these, there were also the judges of local *nizamiye* courts.⁴⁷⁴ The government applied the same curtailment to the salaries of education bureaucracy. Somel findings display that there was a gradual decline for salaries of instructors during the 1880s and 1890s.⁴⁷⁵ With respect to purchasing power, the forest officials were not better of

⁴⁷⁴ François Georgeon, *Sultan Abdülhamid*, trans. Ali Berktaş (İstanbul: Homer, 2006), p. 200.

⁴⁷⁵ Somel, *The Modernization of Public Education in the Ottoman Empire, 1839-1908: Islamization, Autocracy, and Discipline*, p. 163.

than the other government officials in the late nineteenth century. Only about the ten percent of all forest officials received more than 500 *guruş* monthly salary at the beginning of the twentieth century. These medium level of salaries provided a modest standard of life for mid- and high-level officials, whereas the lower ranking officials would have encountered great difficulties to survive.⁴⁷⁶

Between 1884 and 1900, the government issued six directions (on 19 May 1884, 3 August 1885, 12 December 1885, 10 July 1893, and 3 April 1897), which terminated one another, recasting the dismissal and nomination of forest officials. The last directions, on 31 October 1899, put an end to the complications in the bureaucratic disorganization. According to the latter direction, the ministry forbade the dismissal, appointment, and suing of local officials by the local governments and forest inspectors without consulting the forest administration. The ministry charged the inspectors first with making an inquiry about the misdeeds of officials and then, if the conditions necessitated, with deposing them temporarily from office. The final decision about the reemployment of these officials was to belong to the central administration after discussing the reports of the inquiries.⁴⁷⁷

The functioning of the Forest Administration was disturbed due to the frequent modifications in the ministerial changes within the government. From its establishment in 1869 until the end of the Empire, the institution was attached to several different ministries. It seems that the financial bottlenecks, administrative difficulties, and some other contingent factors motivated the government to make institutional readjustments in the forest administration. The below table shows the attachments of the forest administration to different ministries:

⁴⁷⁶ For more information on the modes of living for different professions, see: Somel, *Modernization of Public Education*, pp. 162-65.

⁴⁷⁷ *Muharrerat-ı Umumiyye*, no. 33, 19 Ta 1315/31 October 1899.

Table 10: Ministries the Forest Administration affiliated, 1869-1920.

Period	Years	Name of the Ministry
1869-1908	1869-1872	Finances
	Sept 4, 1872-Oct 29, 1872	Forest and Mines
	Oct 30, 1872-1877	Finances
	1878	Forest and Mines
	1879-1886	Trade and Agriculture
	Dec 23, 1886-1892	Finances
	Mar 13, 1892-July 28, 1908	Forests, Mines, and Agriculture
1908-1920	1908	Forests, Mines, and Agriculture
	1909-1920	Trade and Agriculture

Source: Yund, *Orman Müdürleri Albümü*, pp. 93-101.

The ebbs and flows in the forest administration were directly related to these readjustments. Between 1869 and 1872, there were very few attempts in relation to the management of forests. The application of the Regulation was hindered due to the resistance of timber merchants, military institutions, and the Water Administration, especially in Istanbul.

3.6. Conclusion

The early centralization efforts during the Tanzimat era could not end such practices of greedy officials and contractors, but increased their opposition. It seems that they sought to find new ways for acquiring the wealth coming from these fields. The immediate solution that the government found was sending government agents to the provinces, but the subsequent practices displayed that this was not an effective remedy either.

Such financial and administrative regulations after the Tanzimat were a part of the Ottoman 'rationalization' of state administration, which aimed to change, if not modify, the pre-existing and disorderly fiscal and economic practices into a more workable inventory. To this aim, the rules and regulations were rearranged to attain an economic growth and productivity and to establish an efficient and flexible administration that could deal with a radical change in the economy and

society. Despite the results of this experience, these early administrative efforts of the Tanzimat period provided the necessary ground for the reforms of the second half of the nineteenth century, when the Ottoman state began to benefit more from the European knowledge and technology in its attempt to regulate the natural, social, and economic environment. Although a process of bureaucratization did not accompany the rationalization of administration and economy in the early Tanzimat period, it began to dominate the state affairs after the Crimean War.

Nonetheless, the General Probe symbolized a new era in the penetrative tendencies of the Ottoman modern state into its forests. The government realized that the new projects concerning forestry could only be possible by a detailed information on the conditions of provincial forests. Articulating a local knowledge of forests would help the government to develop resources of the empire more efficiently, which was rather unthinkable in the pre-industrial period. Gathering all this information was entrusted to local officials. Officials were forced to provide detailed reports on the conditions of forests in their respective territories. This venture represented a new outlook to forest radically different than previous mentalities. It was the first attempt in the Ottoman Empire to make the forest more 'legible'. With the initiation of the Probe, the modern state's concern to "order, measure, and discipline" soldiers and subjects, applied also to forests.

The Bosnian forest problem probably sparked off the government's attention to provincial forest resources. Moreover, the increasing demand of the Imperial Shipyard for timber, especially after the Sinop disaster on 30 November 1853, and uncontrolled cuttings from the state forests during the Crimean War motivated the Ministry of Navy to monopolize the administration of forests. Through the Council of Public Works, the central government aimed at taking full control of traditional ways of managing natural resources.

The French forest experts introduced new concepts of forestry to the Ottoman Empire. They reformulated the principle of sustained yield for the management of

Ottoman forests. The term silviculture and *aménagement* was unknown to the Ottomans before the arrival of the French experts. The survey of Ottoman forests provided very valuable information on the condition and commercial capacity of Ottoman forests. Motivated by the foreign demands, the government decided to regulate the timber sales by way of a *Cahier des Charges*. Although there were attempts to teach scientific forestry in the Empire and to codify rules and regulations, in practice these efforts were hindered due to financial problems. For the supervision and exploitation of forests, a new administration based on utilitarian principles was needed. The forest administration was just that utilitarian administrative system, in which strict attention to rules and procedures was mandatory. Considering the total number of forest officials at the time of the creation of the Forest Administration in 1869, which was 279, the increase in the number of personnel and the diversification of appointments reflected the late nineteenth-century professionalization of Ottoman forest bureaucracy. The scope and function of bureaucracy represented also the Ottoman government's gradual enlargement of interventionist aims regarding the forests of the empire.

CHAPTER 4

FOREST LEGISLATION AND LEGAL TRANSFORMATION

4.1. Introduction

In the second half of the nineteenth century, the Ottoman modern state undertook a rather hasty codification movement. The plans on the way for development came to be determined by laws, regulations, decrees, instructions, standardizations, and alike. As discussed in the previous Chapter, this process was accompanied by a gradual bureaucratization of the forest administration.

The aim of the foresters and the government to render forests more productive was partly accomplished with the establishment of the institutions for administration and management. However, the new perception of forestry needed further intensification by a general statute to support the development and continuity of the 'mission'. Under these conditions and the experiences of the 'long' 1860s, Ottoman forestry entered into a more radical phase during the 1870s. This period was characterized with the codification of the Forest Regulation in 1870 and several supplementary instructions, which were aimed to fill the gaps opened by the regulation. The Forest Regulation of 1870, by the same token, did not include the necessary and sufficient articles for opening the forests to any

competition. As such, Ali Rıza, one of the forest inspectors, argued that it lacked the provisions for a “good protection and orderly administration” of state forests.⁴⁷⁸

Starting from the 1860s, the central government initiated a program for designing a new body of rules and regulations concerning forestry. The instructions given to the official foresters and their successive reformulations complemented this process of codification. Since the establishment of the Council of Public Works, the central government dealt with forestry problems by utilizing certain separate decrees issued by the Council and some of the articles of the Land Code of 1858. But, this process was rather troublesome due to the complexity of rules governing landownership and incongruous relationship of the separate decrees aimed to regulate forestry matters.

The earliest attempt of an organic set of forest laws was the Bill of 1861, which was devised entirely by the Council of Public Works. Though this Bill introduced a new approach to forest utilization in the Ottoman Empire, the hastiness of the foresters during its preparation manifested itself in the content of the articles. During the following decade, until the proclamation of the 1870 Forest Regulation, the experts and politicians stressed the importance of forest regulation, protection, and supervision of forests for the common benefit of both the state and the public. However, the increasing professionalization of forestry practices and the desires to make forests more productive rendered the existing laws rather insufficient.

Finally, with the proposal of the French board of experts, the Ottoman government issued the Forest Regulation on 14 January 1870 to manage the administration of forests under a single body of rules and regulations. This legal document incorporated some stipulations related to scientific forestry. It provided the state an effective legal tool to take active steps in forest policy. In general, the

⁴⁷⁸ [Ali Rıza], “Orman ve Mer’â Kanununun Esbab-ı Mucibe Layıhası,” p. 230.

Forest Regulation defined the prohibitions in forests, the rights and 'privileges' of local people, of the merchants and contractors, the supply of Imperial Shipyard and Artillery, browsing in forests, and finally the penalties for forest offences.

Shortly after its promulgation and application, the Forest Regulation became inadequate for the management and tender of forests. To eliminate some of the difficulties caused by the inadequacy of the articles in the Regulation, three new legislations were undertaken to improve the Forest Regulation between 1871 and 1873. These three instructions were designed to fill the certain missing issues in the Regulation. Thematically, they included issues such as taxation, title deeds, extraction of resin, the granting of timber, wood, and charcoal to peasants and special provinces. Moreover, the government established a special commission under the chairmanship of Yusuf Bey in October 1873 to further improve and annotate some of the imprecise articles of the Regulation.⁴⁷⁹ Between 1873 and 1876, the Forest Directorate and the Forest Council, as administering bodies, issued three additional and more detailed instructions to clarify the imprecise articles of the Regulation. These latter triplet aimed at clarifying the 5th article of the Forest Regulation.

The government tried to fill the vacancies of the Forest Regulation with some supplementary rules and instructions. But all these solutions created new and important administrative problems. The instructions given to forest officials were twofold: 1) they defined the commercial interests of the government, and 2) they contained rough principles for scientific protection of forests. The local officials mostly succumbed to the commercial concerns but some also tried to maximize the revenues of the state in order to be gratified by the state and to rise in the administrative hierarchy. The minister himself issued many decrees that included name by name successful local officials who succeeded in increasing the revenues

⁴⁷⁹ BOA, *A. MKT. MHM.* 466/89 (26 Ş 1290/19 October 1873); BOA, *A. MKT. MHM.* 467/92 (11 N 1290/2 November 1873); BOA, *A. MKT. MHM.* 471/61 (10 Za 1290/30 December 1873).

within their individual domains (the forest administration encouraged such a policy). It seems that the inclusion of scientific methods to the code and other instructions and the definition of these methods were not sufficient enough to protect forests from exploitation. The forest experts thought that such rules could not prevent encroachments by the people and merchants. They argued that there should be additional rules and regulations specifically mentioning the obligations of forest officials and guards in the localities.

4.2. Land Ownership vs. Forest Ownership

The forest history of the Ottoman Empire with respect to property relations is rather unexplored. The ownership of forest lands until the promulgation of the 1870 Forest Regulation as such was legally more ambiguous than agricultural land ownership. Even outright ownership of forests was nearly impossible up to a certain point, though there were some private forests granted by the royal authority, the Sultan. The *miri* (public) and communal property was by far the most common type of ownership in the pre-industrial period. There were also the crown forests, belonging exclusively to the royal family, who theoretically enjoyed absolute property rights. But spatially, these constituted a very small portion of the empire's total forests. On the other hand, montane forests—the forests in the *cibal-i mubaha*—which could not be owned (or claimed to be owned) by anybody, were probably the largest in terms of their area. Apart from the private forests, the *rakabe* (eminent domain) of all forest lands belonged to the public treasury. Again, the *cibal-i mubaha* forests, usually unregistered, can be included in the category of the public property. Be as it may, this categorization of ownership was intrinsically blurred with regard to forest lands. The complexities inherent in these categories

caused many problems until the codifiers of the Land Code defined them more clearly. Yet they were still not adequate enough for the larger project of forestry.

The need for a body of organic laws for state administration was voiced during the hot days of the Crimean War days. In late 1855, Cevdet Paşa, one of the leading Tanzimat-reformists, criticized some statesmen of the period due to their inclination to translate French codes, especially the Code Civil, into Ottoman-Turkish to be adapted in the Empire and practiced at *Nizamiye* courts. One of his well-known legislative works has been the Land Code (*Arazi Kanunnamesi*).⁴⁸⁰ This very fundamental document, completed and accepted in 1858, provided a major legal framework to most agricultural issues. The Land Code also touched upon some issues which concerned forestry.

The Ottoman Land Code stipulated land categories which were to be referred later in the Forest Regulation of 1870 and in subsequent state edicts and decrees. Among these categories, forests in state lands (*arazi-i miriyye*), in the lands of pious foundations (*arazi-i mevkufe*), in uncultivated lands (*arazi-i mevat*), and in abandoned lands (*arazi-i metruke*) were subject to the Regulation. On the other hand, the forests on freehold lands (*arazi-i memluke*) were excluded. But there were some articles in the appended regulation—the Regulation on the Supply of Timber for the Shipyard and Artillery—to the Forest Regulation of 1870 that restricted the use of freehold forests, which will be discussed later in this Chapter.

In the nineteenth century, the category of the *miri* (state/public) represented “the control of the central government over land revenues to the exclusion of all

⁴⁸⁰ “Arazi Kanunname-i Hümayunu,” *Düstûr* 1. Tertib, vol. I (7 N 1274/21 April 1858). Sir Stanley Fisher, *Ottoman Land Laws: Containing the Ottoman Land Code and Later Legislation Affecting Land with Notes and an Appendix of Cyprus Laws and Rules Relating to Land* (London and New York: H. Milford, Oxford University Press, 1919). M. Belin, “Etude sur la propriété foncière en pays musulmans et spécialement en turquie (rite hanéfite). Part 2,” *Journal Asiatique* XIX (April-May 1862). F. Ongley, *The Ottoman Land Code*, ed. Horace E. Miller (London: W. Clowes and Sons, 1892).

other groups.”⁴⁸¹ In doing this, the state also came to control the constitution of individual ownership rights by subjecting them to the modern state practices, such as the issue of title deeds and the enforcement of contracts, which simultaneously siphoned revenues to the public treasury.⁴⁸² The forests on the state lands, however, followed a different trajectory after the promulgation of the Forest Regulation in 1870. Although these forests were declared as state property even before the Forest Regulation, the state did not approve the usufruct rights on such forests acquired through title deeds (*tapu*) granting leasehold rights to the owner. After the introduction of the Regulation, many problems occurred because of inaccurate or invalid title deeds.

Following the promulgation of the Forest Regulation, it were the articles of the Land Code which began to be applied to the freehold lands or freehold forests. Though these forests seemed to be under the absolute ownership of the individual, in practice, the Imperial Shipyard and Arsenal had certain rights on the trees, which were considered to be suitable for shipbuilding. However, these type of forests were very problematic, because of poorly specified boundaries and false title deeds based on these boundaries.

Forests on lands of the ‘pious foundations with assigned incomes to the private persons’ (*arazi-i mevkufe-i tahsisat*) were differentiated from the forests on the ‘lands of state-administered pious foundations’ (*arazi-i mevkufe-i mazbuta*) and kept under the control of the “Regulation on the Supply of Timber for the Shipyard and Artillery.” But, at the same time, some rights of the boards of trustees (*mütevelli*) were kept intact.

The communal forests (*baltaliks*, or coppices) were included in the *arazi-i metruke* category, side by side with meadows and pastures. In essence, these were naturally state lands, but use and enjoyment rights were transferred *ab antiquo* to a

⁴⁸¹ Islamoğlu, “Property as a Contested Domain,” p. 28.

⁴⁸² *Ibid.*, pp. 27-29.

village or a town as communal property. The government considered them as public good, thus public interest on them was above other claims. These forests could not be the subject of private property claims.

4.2.1. Major Problematic of the Land Code: Tree Tenure

To understand the forestry-related issues in the Ottoman Empire, it is essential to have some knowledge of the Land Code of 1858 and some of its articles that are directly concerned with the forests and grasslands in general. In the beginning, many terms used in the Land Code to define forest lands were transferred to subsequent regulations and instructions concerning forestry.

The foremost problematic of the Land Code was the condition of property in trees on different categories of land. The ownership of land was separate from the ownership of trees on land.⁴⁸³ The condition of trees had played a very important role in determining the usufruct rights from the woodlands in general. This property was of two kind: first was the property in trees in communal or state forest; second, the property in trees located on the land of another person. For example, the articles which define the status of trees on state lands were basically instituted to prevent the access of third persons to these lands.⁴⁸⁴ However, when we come to 1860s, difficulties arose due to the complex stipulations of the Land Code, which occupied the members of the Imperial Land Commission, especially during the land surveys (*arazi yoklamaları*) between 1860-67. The vice-president of the Commission, Hyde Clarke, a British ethnographer, explained this complication quite clearly:

Thus in a field there might be seven olive trees, say three belonging to a widow and two each to daughters, in no way related to the owner of the

⁴⁸³ Imber, *Ebu's-Suud*, p. 228.

⁴⁸⁴ Islamoğlu, "Property as a Contested Domain," p. 31. See also the articles 18 and 27 of the Land Code explained below.

field. There was separate compensation to the latter, and to each tree owner.⁴⁸⁵

The somewhat complicated rules of ownership in trees in the Ottoman Empire made Clarke criticize the traditional conception in the West that property begins in land. On the contrary, he argued that, by looking at the practices in the East (including China and elsewhere), the right of individual property in trees might have preceded the right of property in land.⁴⁸⁶ Thus, according to Clarke, in the old times “the trees may have given ownership in the land, rather than the land giving ownership in the trees.”⁴⁸⁷ The trees on any category of land become appendages of the land only after the introduction of the Forest Regulation of 1870.⁴⁸⁸

The Land Code stipulated that any individual who would graft naturally growing [fruit-bearing] trees on the ground in his possession, or in joint ownership, would acquire the freehold of such trees. Neither the joint owner nor the land official could be able to intervene into the ownership of them, but only the tithe from the annual product could be received.⁴⁸⁹ On the other hand, a person could not take possession of any naturally growing tree by grafting it unless s/he received the authorization of the possessor. If the grafter did not receive the necessary permit, the possessor had an absolute right to prevent the person from grafting. If someone

⁴⁸⁵ Hyde Clarke, “The Right of Property in Trees on the Land of Another, as an Ancient Institution,” *The Journal of the Anthropological Institute of Great Britain and Ireland* 19 (1890): p. 200.

⁴⁸⁶ Ibid.

⁴⁸⁷ Ibid., p. 201.

⁴⁸⁸ For an evaluation of the legal aspects of the Regulation, see: Halil Cin, “Tanzimattan Sonra Türkiye’de Ormanların Hukuki Rejimi,” *Ankara Üniversitesi Hukuk Fakültesi Dergisi* 35, no. 1-4 (1981).

⁴⁸⁹ See the Article 26 of the Land Code. Belin, “Etude sur la propriété foncière,” p. 306.

grafted the tree on another person's field without his knowledge, the possessor, but through the agency of the *sahib-i arz*, could force the person cut it.⁴⁹⁰

For the trees on state lands, the matter was rather less complicated. For example, any fruit or non-fruit trees, such as valonia oak, walnut, chestnut, hornbeam and oak, naturally growing on any state land (without exception), follows the condition of the land. Thus, the usufructuary had the right to benefit from the product of the trees unless the canonical tithe (*öşr-i şer'i*) is paid from the harvest for the account of the public treasury. But, these trees could be cut or uprooted neither by the possessor, nor by anyone. If someone ever cuts or uproots one of these trees, he or she will be liable to pay the *standing value* of the tree to the public/state treasury.⁴⁹¹

Since the traditional Ottoman land tenure system was concerned with the durability of agricultural production, the establishment of non-fruit tree plantations was strictly supervised. For example, although a person could be the owner of non-fruit trees planted on the ground in his possession, s/he could only plant these trees by getting the permission of the land official, the *sahib-i arz*. If the individual did not get the necessary, the official could make him/her cut or uproot the planted trees warranting that s/he suspended cultivation.⁴⁹² On the other hand, the permission gave the planter certain important rights over these trees. Only s/he had the right to cut or uproot them. Any other person who would like to cut them was to reimburse the standing value to the owner. This applies to the confiscation of the

⁴⁹⁰ Article 27 of the Land Code. Ibid.

⁴⁹¹ See the Article 28. Ibid., p. 306-7. Article 882 of the *Mecelle* (Civil Code) defines the standing value (*kaimen kıymet*) as follows: “*Kaimen kıymet, ebniye ya da eşcarın buldukları yerde durmak üzere kıymetleridir ki arz bir kere ebniye ya eşcar ile beraber ve bir kere [de] ebniye ya eşcardan halî olarak takvim olunub iki kıymet beynindeki tefazul ve tefaviid ne ise ebniye ya eşcarın kaimen kıymeti demek olur.*” Osman Öztürk, *Osmanlı Hukuk Tarihinde Mecelle* (İstanbul: İslamî Bilimler Araştırma Vakfı, 1973), p. 267.

⁴⁹² Ali Haydar, *Şerh-i cedîdi'l-kanûni'l-arazî* (İstanbul: A. Asaduryan Matbaası, 1321 [c1903]), p. 168.

felled trees after paying the costs of cutting to the logger.⁴⁹³ According to the locality, the government imposed on this kind of plantation groves an *icare-i zemin* (ground lease) being equivalent to the tithe. However, it was not legal to receive either ground lease or tithe, even any kind of taxes, from the naturally growing trees located on the boundaries of cultivated fields, farmlands, or meadows.⁴⁹⁴

On the other hand, clearing a forest did not constitute a major problem for the possessor. For example, the Article 19 specified that any individual, who owned the possession of a forest, or *pirnallık*,⁴⁹⁵ by a title deed, could cut down the trees to open the land for cultivation. But if this forest, or *pirnallık*, were in joint ownership, any of the joint owner by his own will could not clear the whole or part of the forest in question without taking the approval of other shareholders. However, if one of them cleared the land, the other shareholders would also be joint owners of the part of the forest land that had been cleared. Thus, it seems that clearing a forest for agricultural purposes was much easier than afforesting an arable field before the stipulation of the Land Code.

Another important complication was related to the naturally grown trees owned by a title deed. The Article 30 of the Land Code stipulated that except for the trees on *cibal-i mubaha* and those forests and groves specifically assigned for the use of villages, naturally grown trees in groves could be transmitted from father to son or be received by sale unless they were possessed by a title deed (*tapu*). This title provided the owners with the right to firewood (*hakk-ı ihtitab*), which meant that the owner alone had the right to cut these trees. The titleholder could prevent another person's claims for cutting by applying to the local land official. But, if the

⁴⁹³ Ibid., p. 169.

⁴⁹⁴ In this case, the ground lease also called the *bedel-i öşr-i mukata'a*. Ibid.

⁴⁹⁵ *Pirnal* [meşesi] means the Holm oak (*Quercus ilex*). The origin is probably Albanian, *prinari* or *prinos*. There is also another species of *pirnal*, which is occasionally used in the Ottoman documents, namely *Kermes meşesi* (Kermes oak, or *Quercus coccifera*). Belin, "Étude sur la propriété foncière," p. 302fn2.

cutting did take place without the knowledge of the owner, the standing value of the logged trees was to be reimbursed to the state treasury instead of the titleholder. The state treasury received also a ground lease, which was equivalent to the tithe, from the land of such groves. It is interesting to note that the procedure applied to these forests was similar to that of the state lands (*arazi-i miriyye*), though the titleholder did not have similar rights with respect to land use. This disparity only resolved with an addendum issued on 16 L 1286/19 January 1870, which affirmed that the standing value of the logged trees belonged the titleholder.⁴⁹⁶

In conclusion, the grafted trees were not dependent on the ground like the naturally growing trees, which means the transfer of the ground did not affect the possession of grafted trees unlike the naturally grown trees. But if the person who grafted the trees was unknown, the possession of these trees transmitted to the public treasury.⁴⁹⁷ There was a very sharp distinction between the grafted and naturally grown trees in the Land Code, which further complicated matters concerning forest lands. As such, it was nearly impossible to afforest a state land by a private enterprise, because to afforest a certain land for adopting it as a grove, the ground had to be in freehold (*mülk*).

As stated, the nature of tree ownership had been a central aspect of the land use. Tree tenure is defined as consisting of “a bundle of rights which may be held by different people at different times. Four major categories of rights make up this bundle, the right to own or inherit, the right to plant, the right to use and the right of disposal.”⁴⁹⁸ One can add this bundle also the ‘right of grafting,’ as practiced in the

⁴⁹⁶ Ali Haydar, *Kanun-ı Arazî*, pp. 169-70.

⁴⁹⁷ *Ibid.*, p. 155. Also see the 1245th article of the *Mecelle*. Öztürk, *Osmanlı Hukuk Tarihinde Mecelle*, p. 322.

⁴⁹⁸ L. Fortman, “Tree Tenure: An Analytical Framework for Agroforestry Projects,” in *Land, Trees and Tenure, Proceedings of an International Workshop on Tenure Issues in Agroforestry*, ed. J. B. Raintree (Madison, USA: University of Wisconsin, 1987), p. 17.

Ottoman tree tenure system. Such ‘bundle of rights’ might have been utilized by local people as a means of claiming certain rights over land utilization. Nevertheless, it is quite difficult to find a specific rule or provision, which provides a more clear-cut definition of tree tenure. With the demands of change in the land tenure system after forests were elevated to wealth-producing status, however, the definition of forest ownership became more and more complicated and a challenge to the codifiers.

4.2.2. Forest Classification and Access Regime in the Land Code

The legal and administrative definition of the ‘forest’ as a concept was, in fact, unclear in the Ottoman legislation. Traditionally, it was included in different categories of land. Take, for example, the *miri* (public/state) lands, of which the *rakabe* (eminent domain) belonged to the public treasury. These lands included arable fields, meadows, winter and summer pastures, forests, and similar fields, which the government granted right of usufruct and enjoyment. They could be acquired formerly after receiving *temessüks* (title deeds) in case of transfer or escheat (*mahlul mülk*) with the permission and concession of the *sahib-i arz*, formerly the *timar*- and *zeamet*- holders, and later the *mültezims* and *muhassıls*. With the promulgation of the Land Code, the government slightly modified the procedure of access rights and instituted that the possession of these types of land could be held only with the permission and concession of the agents of the central government.

The agents of the central government, *sahib-i arz*, who were entitled to grand *tapus* (title deeds)⁴⁹⁹ became revenue officials (*mal müdürü*, *defterdar*, or *kaza*

⁴⁹⁹ With the Tapu Regulation of 1859, the owners of *temessüks* were invited to change them with the new *tapus*. “Tapu Nizamnamesi,” *Düstûr* 1. Tertib, vol. I (8 C 1275/13 January 1859).

müdüri) in the countryside. However, after the establishment of the *Defter-i Hakani Nezareti*, the Land Registry officials (*Defter-i Hakani memurları*) in the provinces and Tapu scribes (*Tapu katipleri*) in the districts became the *sahib-i arz*. But, with a decree on 26 Z 1292/23 January 1876, the government announced that in the provinces, where there were no Land Registry officials, the former revenue officials were to act on behalf of them.⁵⁰⁰

The possessors of *miri* lands (*mutasarrıf*) would receive a *tapu*, carrying on it the imperial signature (*tuğra*). The *tapu* is defined as the ‘rent paid in advance’ (*mu‘accele*). The background of this regulation can be seen in the imperial decree of 24 August 1857, which stated that the rules and regulations of state lands would be applied to the winter and summer pastures, and to forests that were unregistered in the *Defterhane* (Land Registry),⁵⁰¹ which were the lands that were not included in the land surveys of the sixteenth century onward. At face value, this order seemed to be ambiguous, but reading in between the lines, it is clear that the government was trying to legalize the fact that the forests and pastures on abandoned lands (*arazi-i metruke*), i.e. village and town coppices and pastures, and those on dead lands (*arazi-i mevat*), and *cibal-i mubaha* forests, were theoretically state lands.⁵⁰² Moreover, the state, under the terms of Article 28 of the Land Code, “would have the right of free exploitation of wood and forests on the crown lands occupied by private individuals. This right was not exerted up to now and the owners of these forests continued to enjoy them exclusively.”⁵⁰³

⁵⁰⁰ Ali Haydar, *Kanun-ı Arazî*, p. 33.

⁵⁰¹ Ömer Lûtfi Barkan, “Türk Toprak Hukuku Tarihinde Tanzimat ve 1274 (1858) Tarihli Arazi Kanunnamesi,” in *Tanzimat* (İstanbul: Millî Eğitim Bakanlığı Yayınları, 1999 [c. 1940]), p. 328.

⁵⁰² For a couple of decrees issued between the Tanzimat and the Land Code concerning state lands, see: *Ibid.*, pp. 351-69.

⁵⁰³ Belin, “Etude sur la propriété foncière,” p. 306.

For codifying forest rules and regulations, the most relevant article in the Land Code was the 104th article, because of its unambiguous stipulations. According to this article, cutting wood and timber from unclaimed forests and mountains (*cibal-i mubaha*) was unrestricted and free. On the other hand, the 28th article of the Land Code was covertly granted the state the right of absolute authority in woods and forests on the lands belonging to the state, even if they were occupied by private individuals.⁵⁰⁴ However, since the government did not exert sanctions unless its revenue objectives and timber supplies were threatened, the usufructer nearly enjoyed exclusive benefits from such forests. Subsequently, many of these forests on state lands were registered by local powerholders under their names.⁵⁰⁵

The Land Code permitted anyone to cut trees from the mountains and *balkans* (montane forests, thickly wooded mountain ranges), the *cibal-i mubaha*,⁵⁰⁶ without the interference of another person unless the woods and forests on them did not belong *ab antiquo* to a certain village or town, because the peasants and townspeople traditionally were granted certain rights, especially for making firewood and charcoal. Moreover the tithe could not be claimed from grass, hay, straw, or fodder or trees obtained from these same *cibal-i mubaha*. On the other hand, the parceling out of any portion of these montane forests, independently or jointly (*müstakillen ve müstereken*), could not be leased out by the land officials to anybody by way of a *tapu* for adopting the section as private forests.⁵⁰⁷

⁵⁰⁴ Ibid.

⁵⁰⁵ This process will be discussed in Chapter 5.

⁵⁰⁶ See the Article 30 above.

⁵⁰⁷ See also BOA, A. MKT. MHM. 15/91. In relation to the Article 104, the articles 1243 and 1254 of the *Mecelle* also states that everyone has the right of enjoyment/usufruct (*intifa' hakkı*) of the naturally growth trees on the *cibal-i mubaha*, the mountains which are not under freehold. Öztürk, *Osmanlı Hukuk Tarihinde Mecelle*, pp. 322-23.

What constituted *cibal-i mubaha*, the ‘unclaimed/permitted forests and mountains,’ however, was not clearly specified. When the government accused local people of illegal cutting from state forests, peasants could, and usually did, challenge such claims. The most common counterclaims included arguments such that “there was no suitable timber for the Shipyard in that forest,” or that “it was not a State forest but a *cibal-i mubaha*.” When local acts of utilization were thought to have spread at the expense of forests reserved for the Shipyard, the central government issued decrees to prevent incursions to *cibal-i mubaha* forests.⁵⁰⁸ Finally, the 5th article of the Forest Regulation limited customary usufruct claims over *cibal-i mubaha*, which will be dealt later. So far the rules concerning the utilization of forests in freehold lands, state lands, and unenclosed mountains has been discussed. The following section will look at the forests and groves left for the public utilization, which were, in fact, uncultivated lands (*arazi-i metruke*).

Article 91 of the Land Code underlined that the trees of *baltaliks* (coppices), groves and forests assigned *ab antiquo* to the usufruct of a village or a town, would be cut only by the inhabitants of these localities. Nobody did have the right to cut trees from these *baltaliks*. Likewise, if similar woods and forests were assigned, again *ab antiquo*, to several villages, the inhabitants of other villages could not cut trees from them. These kinds of woodlots and forests were also exempted from taxation.⁵⁰⁹ On 10 Ra 1293/5 April 1876, a supplement was added to this article, which settled that if the inhabitants of a certain village encroached upon and cut trees from the *baltalik* of another village, they were to pay the standing value of the logged and uprooted trees to the village inhabitants, who had the right to firewood from that *baltalik*. Then, this payment was to be distributed equally among the inhabitants.

⁵⁰⁸ BOA, *A. MKT. UM. 105/30* (7 Za 1268/23 August 1852).

⁵⁰⁹ Belin, “Etude sur la propriété foncière,” p. 337.

It was legally impossible to parcel out any wood and forest reserved for the village inhabitants with the aim of adopting it as a private woodland. Also, it was prohibited to grant the possession, either individually or collectively, by a title deed (*tapu*) with the aim of clearing the aforesaid woods and forests for cultivation. If somebody acquired the possession for some reason, the village inhabitants had the right to expel offenders at any time.⁵¹⁰

Moreover, the statute of limitations (*mürur-ı zaman*) could not be affirmed in the lawsuits relating to the *arazi-i metruke*, such as woods, forests, public roads, sites of fairs, markets, and threshing grounds (*harman yeri*), pastures (*mer'a*), and winter and summer pastures/grassland, which were left and assigned *ab antiquo* to the local population.⁵¹¹

The Land Code also defined the access rights and limitations to forests on waste, or dead lands (*arazi-i mevat*). The *arazi-i mevat* category consisted of uninhabited (*hali*) places, which were not in the possession of anybody with a title deed. These lands were not allotted *ab antiquo* for the use of the inhabitants of any town or village. Such lands were distant enough from settlements that the shouting of a person with a loud voice could not be heard. These localities included mountains, stony grounds, *pirnalliks* and meadows (*otlak*).⁵¹² Any individual, who needed a field for cultivation, could be able to freely reclaim and bring into cultivation such wastes by receiving the permission of the local land official on the condition that the eminent domain (*rakabe*) of these fields would belong to the public treasury (*beytü'l-mal*) and thus the provisions of the Land Code be applied to these newly cleared fields (*arazi-i mezru'a*). However, if the person, after having acquired the field with the permission of the local official, did not clear and cultivate it and left the field in the same condition during three consecutive years

⁵¹⁰ See the Article 92 of the Land Code. Ibid.

⁵¹¹ See the Article 102 of the Land Code. Ibid., p. 341.

⁵¹² See also the Article 6 of the Land Code. Ibid., p. 298.

without a valid excuse, the field in question was to be given to another person. In addition, if somebody cleared and cultivated a waste land without the permission of the officials, s/he was to pay the necessary fee in return to receive the title deed of the field.⁵¹³

4.3. Laws Compared: Bill of 1861 vs. Regulation of 1870

Three years after the promulgation of the Land Code, the Ottoman government attempted to issue an organic law, the Forest Bill of 1861, to enforce its aim of rendering forest management and administration more productive.⁵¹⁴ This Bill was the first significant attempt at a reform in state forestry. Its major aim was to resolve the confusion of the previous forest regime, which the French experts considered inoperative. The stipulations of the Bill with respect to the forest management and administration reflects the concerns of the state for the control and manipulation of forests. Though this Bill provided a solid basis for a discussion on

⁵¹³ Ibid., pp. 341-42.

⁵¹⁴ The Council of Public Works devised a memorandum of the draft regulation consisting of 68 articles and presented it for approval to the Supreme Council of Tanzimat (*Meclis-i Âli-i Tanzimat*). Then, the Council translated it into a Bill on 5 M 1278/13 July 1861. BOA, *I. DH. 33929*. After the discussion of the Bill in the Council of Tanzimat, it was presented to certain prominent officials, who were also the members of the *Meclis-i Hass-ı Umumi* (Supreme Council of Ratification), for careful analysis and recommendations before it was sent to the Council of Ministers (*Meclis-i Vükela*). BOA, *A. MKT. MHM. 225/96* (6 M 1278/14 July 1861). These governmental officials were Şeyhu'l-islam Mehmed Sadeddin Efendi; the head of the Council of Tanzimat, Mehmed Emin Ali Paşa; the Grand Admiral, Mehmed Ali Paşa; Mustafa Naili Paşa; the head of the Supreme Council of the Treasuries (*Meclis-i Ali-i Hazain*); the Serasker, Mehmed Namık Paşa; the Minister of Imperial Pious Foundations, Ali Şefik Paşa; the head of the Supreme Council of Judicial Ordinances, Safveti Paşa; Kamil Paşa; the Minister of the Privy Purse; Arif Paşa; [Ahmet] Muhtar Paşa, former Minister of Finances and the Privy Purse; the Minister of Finances, Mehmed Tefvik Paşa; and the Minister of Public Education, Abdurrahman Sami Paşa.

existing forestry problems, it also started a painful period that was prolonged about a decade until the proclamation of the Forest Regulation in 1870.

The Bill is made up of four sections. The first section focuses on the forest officials and personnel and consists of 14 articles (1-14). The second part concentrates on administration and management, and contains 24 articles (15-38). This part is then followed by articles concerning penalties, comprising 21 articles (39-59). The final section specifies judicial procedures of forest offenses, consisting of 9 articles (60-68). To say briefly, the Bill had a rather robust structure, which aimed to regulate the natural resource use, to utilize state forests commercially, and to strictly restrict the customary rights of usufruct. Though it could not find a suitable ground of application until the establishment of the *Şura-yı Devlet* (Council of State), it set the stage for a new understanding of forest management. Nevertheless, the conflicts between the efforts of establishing a centralized administration and the customary claims on forests continued to impose new conceptual and practical limits upon the forest management. Peasants, living nearby forests continued to claim their ancient rights (*kadim haklar*) for grazing, collecting firewood, making charcoal and alike that distracted the effective control of forests.

About a decade later, finally the government managed to promulgate the second organic law of forestry. The Forest Regulation of 1870, though echoed certain reverberations of the Bill of 1861, also differed as it represented a new era of contestation between the state and the customary beneficiaries of forest resources. The Regulation categorized the forests into four; define rights of utilization; regulate felling and collecting of wood; and codify prosecutions, penalties and sentences.

The traditional patterns of using state forests generally caused conflicts with the state authority and peasants after 1860s. When its authority was threatened, the state usually exerted its claim on forest resources more heavily than before. But

peasant claims, which was based by and large on the customary use of land ‘from time immemorial’, could occasionally surpass the restrictions of the state.

When the Council of State was established in 1868, one of its first engagements was the formulation of an accommodative forest regulation. At this point, the Bill of 1861 became the object of study. According to the 4th article of the Internal Regulation (*Nizamname-i Dahiliyye*) of the Council (issued on 18 October 1868), the Department of Public Works (*Nafi’a Dairesi*) was entitled to scrutinize and discuss all kinds of subjects pertaining to forest administration, concessions and contracts, and rules and regulations.⁵¹⁵ The 5th article of the same regulation further acknowledged that the resolution of the conflicts that took place between the government and private individuals, but could not be handled in their respective institutions were also among the tasks of the Department.⁵¹⁶ After the discussion of the Bill in the department, a rejoinder was written, which commented that though the Bill was designed to serve the universal principles of ‘scientific knowledge on forestry’ and to provide measures for forest conservation, it would be better to compile a regulation for defining and regulating the customary usufruct rights of village and town inhabitants as well as the administrative power of the forest administration.⁵¹⁷ It seems that though establishing a just forest policy necessitated

⁵¹⁵ The article says: “*Nafi’a Dairesi orman idarelerine müte’allick hususati ve bunlar için verilen imtiyazati ve akd olunan mukavelati tedkik ve müzakere itmeye memurdur... ve bu maddelerden dolayı usul ve ka’ide iktizasınca ihtarı lazım gelen ve nizam ve usulüne menafi’ görünüb islahı icab iden şeyleri ihtar ve beyan eder.... Orman idaresine müte’allick ihtira’at ve tesisatın tanzimi hakkında bağlı olduğu nezaret tarafından takdim olunarak Şura-yı Devlete havale olunan levhalar ve takrirlerin tedkik ve yine nezaretle bil-muhabere gereken tenkih ve tashih olunması ve bu çeşit ma’ruzat ve teklifatın devlet ve memleketçe menfa’at ve mazarratının muvazenesine ve mevzu’ olan nizamatin ahkâmına tevfiik ve tatbik edilmesi Nafi’a Dairesinin umurındandır.*” BOA, ŞD. 3/52 (1 B 1285/18 October 1868).

⁵¹⁶ The 5th article: “*Dördüncü maddede beyan olunan işlerden dolayı hükümet ve eşhas arasında tahaddüs eden ve mensub oldukları dairelerde tesviye olunamayan münaza’atın fasıl ve halli dahi Nafi’a Dairesinin vezâifindedir.*” Ibid.

⁵¹⁷ [Ali Rıza], “Orman ve Mer’a Kanununun Esbab-ı Mucibe Layihası,” p. 228.

a regulation and ordering of human-forest relations, this policy was to reconsider the peasants' customary uses of forests and their needs of forest products. Thus, in the process of the codification, these uses and needs of peasants always took an important part of the rules and regulations. The statement of the Council proved that there was also a bureaucratic inclination toward securing customary rights of peasants up to a certain degree.

After the introduction of the Forest Regulation, however, the relationship turned out to be a conflict between the 'written' rules and regulations of the central authority against the 'unwritten' rules and practices of local people. The state, however, had acquired a fundamental advantage against the customary claims: It could reformulate its claims as rules and regulations repeatedly, but for local people categorical formulation of *ab antiquo* rights and privileges were nearly impossible. By exerting the force of law, the state could render the concept of 'tradition' problematic by redefining it. But this does not mean that the local people were impotent against these reformulations. They could activate and reactivate the traditional 'hidden transcripts', the effectiveness of which was put to test during the long struggles against central authority.⁵¹⁸

The state also had certain advantages in the definition or non-definition of certain concepts. For example, there existed no definition of the forest as a concept in either one of these laws. This was understandable because of the prevailing conditions of forests during the codification of rules and regulations. It seems to be that this was a conscious choice of the codifiers. Had the forest been defined as a concept, the state's ownership claims over forest lands would be hindered due to customary utilization and management practices. The government wished the Bill and the Regulation to be an effective instrument for the administration and

⁵¹⁸ James C. Scott, *Everyday Forms of Peasant Resistance* (New Haven: Yale University Press, 1985).

management of forests against customary resource use and uncontrolled, usually untaxed, commercial exploitation.

The main similarity of the Bill and Regulation was their strong emphasis on the judicial aspects of forest utilization. Although some of the heavy fines for most offenses committed by the traditional users in the Bill of 1861⁵¹⁹ were softened with the introduction of the Forest Regulation, both of these laws sought to prevent ‘arbitrary’ claims on forest resources. According to the article 37 of the Bill of 1861, the village inhabitants could collect naturally felled trees lying on the ground of state forests within the border of their village without taking the official permission of the forest inspector and without the payment of a fee. On the other hand, in the 1870 Regulation, peasants were authorized to collect felled deadwood from the *miri* forests within their boundary without paying any tax, but taking the oral permission of the forest official. But they were banned to extract and remove stones, turf, green or dried leaves, minerals or other forest products from these forests without a written permit.⁵²⁰ In case of extraction and removal, the offenders were to pay fines.⁵²¹ Subsequently, the government issued a special instruction concerning the permits to regulate the extraction of such non-timber forest products.

⁵¹⁹ See Appendix 2

⁵²⁰ See the Articles 17 and 18 of the Forest Regulation of 1870. “Orman Nizamnamesi,” *Düstûr* 1. Tertib, vol. II (11 L 1286-11 K 1285/13 January 1870).

⁵²¹ For a cartload a fine of 15 *beşliks* (a coin valued at 5 *guruş*), for an animal load 5 *beşliks*, and 2 *beşliks* for a human load would be paid according to the 35th article. *Ibid.*

4.3.1. Forest Reclassifications in the Ottoman Empire

The type of forest ownership had important connections with the use and protection of the forests. The Bill of 1861 did not define any forest category other than the *miri* (state/public). This category only included the forests under the exclusive control of the Imperial Shipyard and some *cibal-i mubaha* forests, which were not exploited by the local people. Private forests (the ownership status of which were either defined by title deeds or not), village and town coppices and *vakif* forests were excluded from this category. As stated earlier, the French experts only surveyed these state forests. On the other hand, with the promulgation of the 1870 Regulation, the categorization of land types—until then based on the Land Code—underwent fundamental changes. The Forest Regulation dealt with the forests which included the *arazi-i emiriyye*, *metruke*, *mevkufe* and *mevat*. The forests, located in the *arazi-i memluka* were excluded. The ownership rights of freehold forests were already specified in various articles of the Land Code of 1858; thus the provisions of the Forest Regulation were not applicable to them.⁵²² Thus, the Regulation respected the protection provided to the private property owners by the Land Code. Though private owners could manage their forests more freely, there were some articles in the appended Regulation that imposed restrictions on the use of *mülk* (freehold) forests, which will be discussed later. According to the first article of the Regulation, the forests of the Ottoman Empire are divided into four categories:

1. Forests belonging to the State
2. Forests belonging to the Directorate of Pious Foundations (*Evkaf İdaresi*)
3. *Baltaliks* (or communal forests) belonging to towns and villages
4. Forests belonging to private individuals⁵²³

⁵²² See above for the Articles 19, 92, and 104 of the 1858 Land Code.

⁵²³ “Orman Nizamnamesi.” Article 1.

All forest lands and their stocks, except for those on the *mülk* (freehold) dwellings, courtyards, vineyards, and gardens; and agricultural fields, and a part of those privileged *vakıf* forests controlled by the Directorate of Pious Foundations were proclaimed and accepted as State property, including those forests that were in the common property of villages along with village coppices (*baltalıklar*). Forests that were situated in waste, or dead land (forests on uncultivated and unappropriated lands, the *arazi-i mevat*) and forests that were at a distance from small towns (*kasaba*) were also considered as State property. The following figure traces the forest classifications from the pre-industrial period up to the Forest Regulation of 1870:

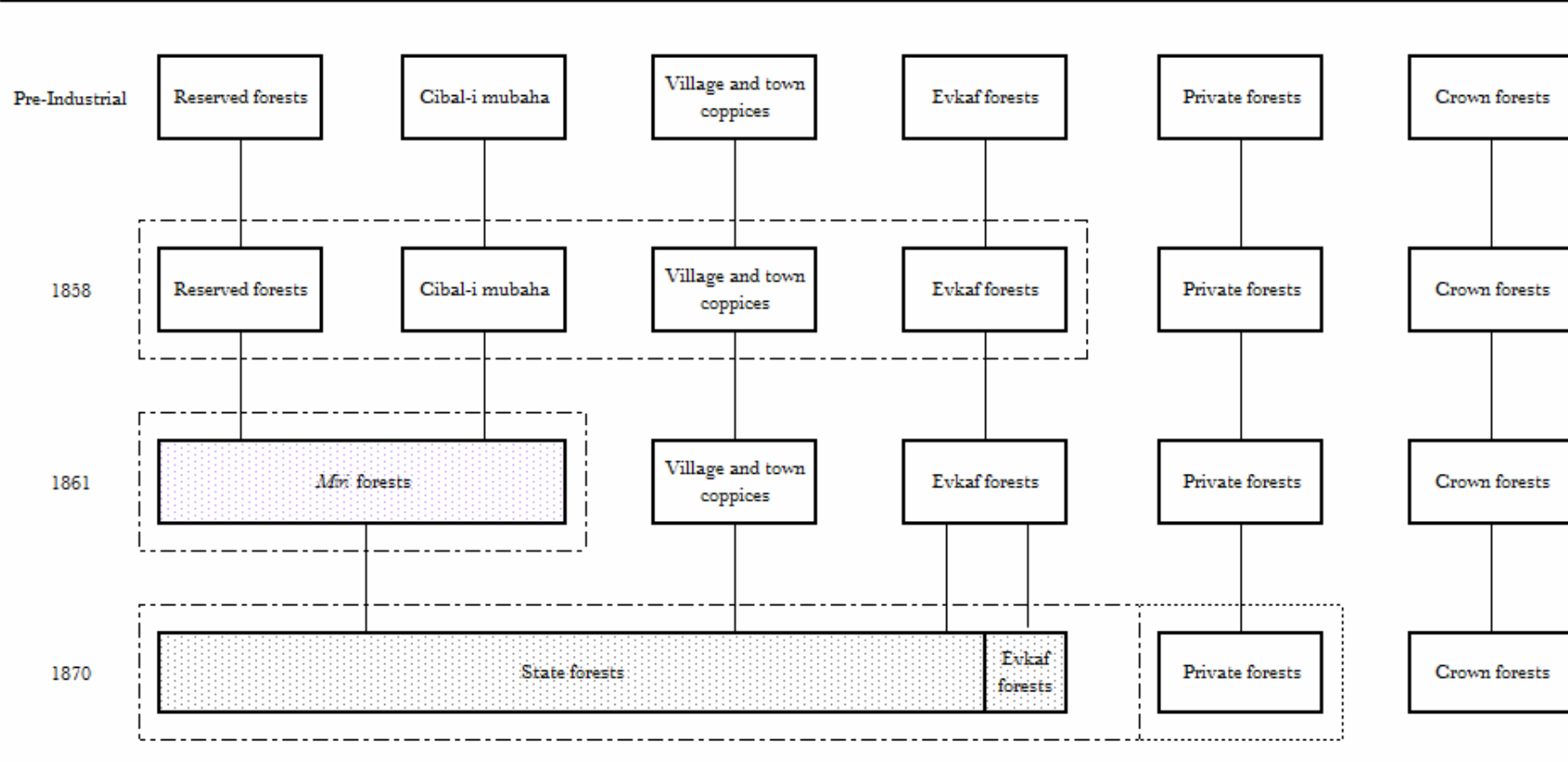


Figure 3: Forest categorization in the Ottoman Empire, c. 1500-1870.

The categorization for the pre-industrial period is rather subjective. Nowhere in the *kanunnames*, have we seen such a classification. The first outline of a forest categorization, in fact, came with the Forest Regulation of 1870. With it, the division of forests into different categories was formulated in a legal document for the first time in the Ottoman Empire, since the Bill of 1861 only talked about a single category: state forest. Communal forests and montane forests were exclusively subjected to the forest regime, but village communities were given basic usufructuary rights from these forests. The following chart displays official numbers for the area and proportion of the forest categories mentioned in the 1870 Regulation.

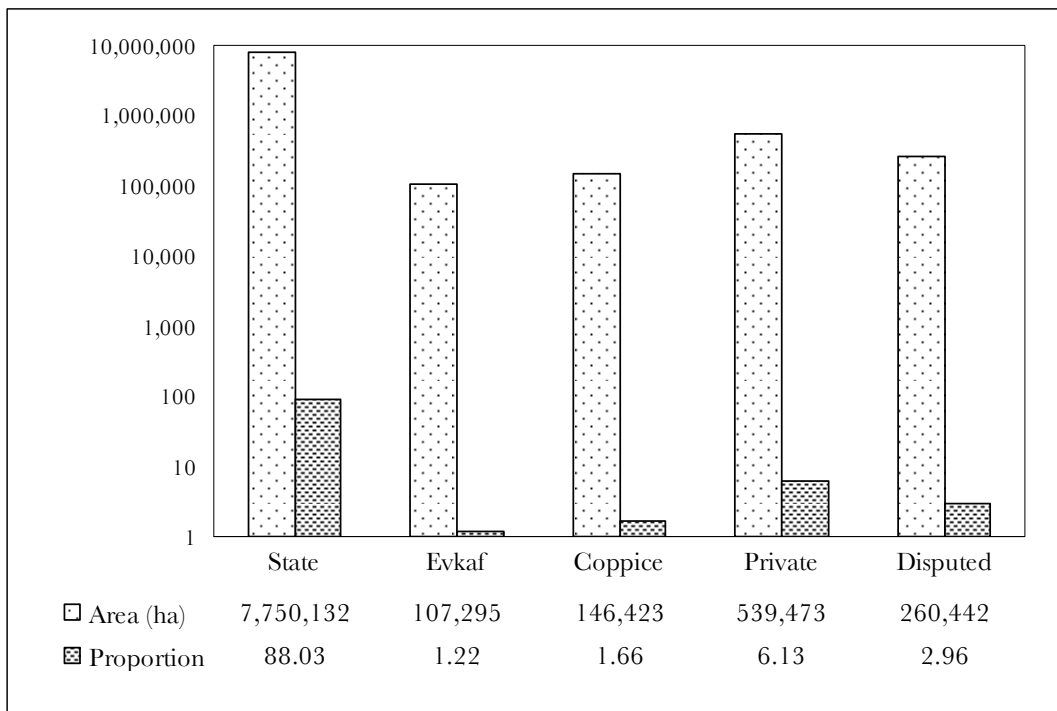


Figure 4: Area and proportion of forest categories in 1907. Source: HK, *Doc. No. 298* (20 Nisan 1326/3 May 1910).

The relatively high figure of state forests, about 88 percent, for this period did probably consisted of some coppices, private and disputed forests, because there were not reliable surveys for all the state forests within the Empire. Be as it may, the Ottoman Empire seemed to have the largest proportion of forest area belonging to state in Europe in the nineteenth century.

Table 11: Area of forests, proportion of forest cover and state ownership of forests for some European countries, c. 1910.

Countries	Area of Forest in Hectares	Percentage of total area of country under forest	Percentage of forest area belonging to state	Forest area per head of population in hectares
Sweden	19,829,626	48	33	3.84
Norway	6,879,666	21	28	3.08
Russia, incl. Finland	209,627,478	40	61	2.39
Bosnia and Herzegovina	2,589,992	50	78	1.62
Bulgaria	3,075,616	30	30	0.93
Serbia	1,578,276	32	37	0.61
Romania	2,589,992	18	40	0.53
Ottoman Empire	8,803,765	10	88	0.50
Spain	8,579,349	17	84	0.49
Hungary	9,105,441	28	15	0.49
Austria	9,712,470	32	7	0.36
Greece	809,373	13	80	0.34
Luxemburg	80,937	30		0.33
Switzerland	849,841	20	5	0.28
Germany	14,164,019	26	34	0.24
France	9,712,470	18	12	0.24
Italy	4,208,737	15	4	0.12
Denmark	242,812	6	24	0.10
Belgium	526,092	18	5	0.08
Portugal	311,608	3.5	8	0.06
Holland	226,624	7	n.a.	0.04
Great Britain	1,214,059	4	3	0.03
TOTAL	314,718,242	22	34	0.76

Source: after Schlich, "Forests and Forestry," p. 647. (The figures for the Ottoman Empire are taken from the official Ottoman statistics. See Chapter 5).

The percentage of the forest cover for the Ottoman Empire was quite low when compared to the average (22 percent) for these 22 countries. Only Holland, Great Britain, Denmark, and Portugal had less percentage of the forest area than the Ottoman Empire. The area per head of population varied from 0.03 to 3.84 hectares. Barely looking at the figures, one notices that Russia including Finland, Sweden, Norway, and to a lesser extent Bosnia-Herzegovina possessed more forest

than they require for domestic consumption. However, Romania and Austria were also other timber-exporting countries. (See Chapter 2, Table 1). The other countries, despite the presence of relative high percentages of total area covered with forests for some, did not seem to have sufficient resources to meet their local demand.⁵²⁴ Schlich argues that, apart from the financial aspect and the supply of industry, the degree of state ownership was determined by the level of the means of transportation:

[f]orests are not required for the sake of their indirect effects, and where importation from other countries is easy and assured, the government of the country need not, as a rule, trouble itself to maintain or acquire forests.... where the cost of transport over long distances becomes prohibitive, a wise administration will take measures to assure the maintenance of a suitable proportion of the country under forest ... either by maintaining or constituting a suitable area of state forests, or by exercising a certain amount of control over corporation and even private forests. Such measures are more called for in continental countries than in those that are sea-bound.⁵²⁵

Basically, the author argues that if transport facilities were easy and guaranteed, the seaborne countries did not necessarily acquire much forest land under the jurisdiction of state. However, the countries mostly relying on overland transportation for distributing of goods tended to acquire and maintain more forests than the others. The Ottoman Empire, on the other hand, was in between. Though it could be classified a seaborne country, the limited means of inland transportation made carriage of timber to remote places quite expensive. Although transport and monitoring costs were considerably high, there is to be some other reasons for the state ownership of forests.

⁵²⁴ Schlich, "Forests and Forestry," p. 647.

⁵²⁵ Ibid.

4.3.2. Customary Rights and Access Regime in Forest Laws

The Ottoman government adopted restrictive measures in its management of forests and woodlands, like prohibiting wood cutting, charcoal making, collecting of nuts, stones, and branches, etc. Obtaining forest soil and turfs were also prohibited to protect the undergrowth needed for the regeneration of forests.

Forest regulations curtailed the customary rights to the forest. Most affected section of the population was the peasants living in or around forests whose subsistence depended on shifting cultivation and felling and transporting wood and timber, either on behalf of government, merchants, or for themselves. Grazing rights were also restricted but not absolutely. As stated, with the passing of the Forest Regulation in 1870 and subsequent legislation increasingly forests within the empire included in the category of state forests for protection and revenue purposes. Under such measures, the question arises as to how customary rights were arranged and restricted.

The first article 15 of the 1861 Forest Bill was most crucial with respect to the customary rights. It stated “henceforth no one shall freely cut a tree from the *miri* forests unless there was an extraordinary circumstance or a proof of special endowment given by the Sultan.”⁵²⁶ Considering the previous rights and privileges, this article seems to be important in relation to the restriction of usufruct rights granted to local people. Apart from the contractors (*mültezim*)—who undertook to cut trees through contracts on behalf of the state or were allowed to fell trees from a designated forest by means of special permits—individuals, who wished to cut trees from the *miri* forests, were to pay a fixed price (*fiyat-ı mukarrere*) that was equal to the half of the real value (*kıymet-i asliye*) of the tree. The real value was figured out from the price of wood and timber sold in the nearest market from the forest, but

⁵²⁶ BOA, I. DH. 33929.

after subtracting the cutting, fabrication, and transport costs, custom dues and other fees as well as the tithe of the previously mentioned costs and taxes.⁵²⁷

The regulation of forest cuttings within local communities remained to be a central concern for the government after 1870, though the Forest Regulation stipulated that firewood and timber for construction and farm implements were indispensable for local people. On the other hand, pursuit for profit was taxed heavily. The Regulation provided that those villages and small towns that did not have a coppice (*baltalık*) were to be granted two basic rights. First, the inhabitants were allowed free of charge to take from the state forests all the wood and timber they needed for the repair or construction of their houses, granaries, and barns, for manufacturing vehicles and farm implements; and second, to collect firewood and produce charcoal necessary for their subsistence. Furthermore, the inhabitants were free to obtain wood and charcoal for selling in the local market if they used their own carriages or beasts of burden. But, if someone would display wood and charcoal for sale in another market, either in person or through intermediaries, or would use someone else's means of transportation, he or she was to pay the government a certain amount of fee and was to conform to the other provisions like the merchants (i.e. pay the fixed price of the trees logged either for making charcoal or firewood) according to the 5th article of the Forest Regulation.⁵²⁸

⁵²⁷ Article 16 of the Bill of 1861. Ibid.

⁵²⁸ The Article says: “*Ahali-i kura süknalarıyla anbar ve ağıl misüllü muhtac oldukları ebniyyeyi tamir veya müceddeden inşa itmek ve araba ve edevat-ı zira’at i’mal eylemek ve ihtiyacat-ı beytiyyeleri mertebesinde kömür yakmak ve odun olmak için miri ormanlarından meccanen kereste ve eşcar kesecek ve fakat ticaret için kat’idecekleri kerasteninin idare tarafından ta’yin olunan kıymet ve esmanını i’taya ve tüccar gibi işbu nizamname ahkâmına itba’ya mecbur olacakları misüllü gerek bi’z-zat ve gerek bi’l-vasita aher mahalle nakl ve fûruht idecekleri hatab ve kömür için miri ormanlarından kesilecek eşcarın idare tarafından ta’yin olınacak kıymetini i’ta eyliyeceklerdir. Her karyenin mensub olduğu pazar yerine ahalinin kendü araba ve hayvanlarıyla nakl ve fûruht itdikleri hatab ve kömür bu hükümden müstesnadır. Ve bunlar hakkında cereyan edecek mu’amelat ta’limat-ı mahsusasında beyan kılınacaktır.*” “Orman Nizamnamesi.”

This last stipulation concerning peasants' rights to use forests aroused criticism among some forest experts. For example, Bricogne argued that if the Ottoman government aimed to make use of its natural resources, the administration should immediately modify this article which, in his opinion, could be interpreted wrongly. This article, he noted, would cause the peasants to control the local trade in forest products. In his report to the government, he advised to interpret the concessions given to the local people with this article as a 'privilege,' not as a 'right'.⁵²⁹ In a similar fashion, the same issue led to a debate among the British officials in India in the 1860s. The British debate ended with a decision that 'the right of conquest is the strongest of all rights—it is a right which there is no appeal.' From that time onward, the customary use of forests was based on 'privilege' rather than 'right' in India.⁵³⁰

In fact, Ottoman codifiers probably did not consider this stipulation as a 'right' given to the local people, since it was, in reality, a limitation of a traditional 'right', which had its roots in customs, even in the *shari'a* (religious law). In this Regulation, there were similar articles that limit the so-called 'rights' of other actors, such as owners of private forests and beneficiaries of pastures.

The government recognized the subsistence needs of villages within or on the neighborhood of forests after the Forest Regulation of 1870. Although the protective concerns continued, the aim of this acknowledgement was not to incorporate village inhabitants to act on behalf of the government's policy, as 'guardians of the forests', but to subject them to the centralized management. However, the 'fuzziness' of the 5th article did not allow the administration to exactly supervise free deliveries to peasants and townspeople. To eliminate

⁵²⁹ Bricogne, *Ormançılık Heyeti*, p. 27.

⁵³⁰ Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*, p. 38. This example is very important as it shows how professional foresters trained in European scientific forestry could reach the same conclusion in two different contexts.

misrepresentations, a special instruction on the conditions of free deliveries was promulgated on 18 May 1871.

4.3.2.1. Free delivery of forest products

This Instruction were most crucial for the peasantry in general. It focused on the bureaucratic procedures to be observed while enjoying the right to utilize from state forests. Roughly speaking, the Instructions were the prime mover of the forest organization, in which the former customs of peasantry are obstructed by an insistence on following certain procedures.⁵³¹ This meant that forests were no longer God's gifts of nature, but instead, they were state property. Peasants' cultural view of trees in a forest as *hüda-yı nabit* (as God's merciful gift to his subjects), growing without cultivation was to change after the implementation of such rules and regulations. This is also related to the process of the commodification of forests resources into marketable goods.

There are two chapters and 13 articles. The first section (articles 1-8) was related to agricultural peasants, for whom forestry was supplementary. It defined the ways in which the village inhabitants were to be given free timber, wood, and charcoal as their means of subsistence (*ihhtiyacat-i zatiyye*) and as indispensable needs (*ihhtiyacat-i zaruriyye*) from the *miri* forests. Second chapter (articles 9-13) was concerned with forest peasants, whose means of subsistence was based solely

⁵³¹ “Orman Nizamnamesinin 5. Maddesi Hükmünce Ahali-i Kuraya Meccanen Verilmesi Lazım Gelen Kereste ve Hatab ve Kömürün Suret-i İ'tası Hakkında Ta'limat [Instructions Indicating the Procedure to Be Followed in Granting Timber, Wood, and Charcoal Free to Villagers According to the 5th Article of the Forest Regulation],” 27 S 1288-5 Mayıs 1287/17 May 1871 *Mevzuat-ı Maliye*, vol. II (1927), pp. 213-15.

on forest products.⁵³² What comes next is a summary of the critical procedures and rules about these procedures.

The council of elders of each village which did not have a coppice (*baltalık*), were to apply to the forest official of their district (*kaza*), each year before March, with a signed petition for the needs of their villagers from the state forests. The amounts of timber, wood, and charcoal were to be written clearly into the tabulations in a voucher attached with the petition. The forest official, after examining the petitions, were to delimit the tracts and time period for logging and charcoal burning and mark trees according to the laid down scientific principles and methods. The mounted forest guard was responsible for supervising the cuttings and removal of trees from forests. The villagers could not start operation without taking the permission of the mounted guard. The forest official was to observe, as far as possible, carefully the time of cuttings so that it would not coincide with the period of agricultural work for peasants. The representatives of the village councils were to be responsible throughout the whole process. After the end of the fellings, they were to sign the voucher and present it to the mounted guard. The guard, then, were to give it to the sub-inspector (*müfettiş-i sani*). At the end of each year, the sub-inspector was to send the special register of total annual fellings to the head inspector of the province.⁵³³

If the urgent needs of villagers for timber and firewood increased after fires, earthquakes, and floods, the forest officials were to provide the needs of peasants without putting a time limit. But he was to follow the scientific principles and methods during the deliveries. On the other hand, the villagers were to conform to the provisions of the Forest Regulation and other special instructions while

⁵³² Ibid.

⁵³³ See the articles 1-6. Ibid., 213-14.

extracting their subsistence needs. Otherwise they were to be punished according to the articles of the Regulation.⁵³⁴

The peasants living within or one-to-two hour distance away from the *miri* forests, but who did not have their own coppice or grove (*koru*) and whose means of subsistence depended exclusively on firewood collecting and charcoal burning and transporting and selling of firewood and charcoal they produced, had the right to cut timber and burn charcoal from state forests (like other peasants who had their own coppices) after taking the necessary permission from the forest official of their region. Similarly, they could sell firewood and charcoal in the nearby market assigned to their villages if they were to transport them with their pack animals and carts.⁵³⁵ But this right was effective only if the aimed trade had domestic purposes (*ticaret-i mahsusa-i dahiliyye*). Again, each year before March, they were to mention the population of their village, the species and quantities of timber they wished to cut annually, the numbers of pack animals and carts that they would use for transport, and finally the name of the local market that they would sell their products. They were to present all this information to the local government of the subprovince (*sancak*, or *mutasarrıflık*) accompanied by a petition. This petition, with the presence of the forest inspector, would be examined in the liva council and the result of the investigation, then, would be sent to the governor of the province. The governor, after taking the opinion of the head inspector, had the authorization to accept or reject the petitions.⁵³⁶ If the villagers were granted the right to extract firewood and charcoal from the *miri* forests, the local forest official began marking the suitable trees and afterwards supervised the felling, charcoal burning and transporting of products. He was to keep a register of the species and quantities of

⁵³⁴ Articles 7 and 8. Ibid., p. 214.

⁵³⁵ Article 9. Ibid.

⁵³⁶ Article 10. Ibid., p. 215.

logged timber and send it to the head inspectors at the end of each year. Then, the head inspector was to send the register to the central forest administration.⁵³⁷

The procedures written in this instruction were effective only for providing the indispensable needs and means of subsistence of village inhabitants. The favors did not extend the timber and charcoal transported to town and cities, or to ports for the aim of selling to merchants and dealers, or to sawmill for producing lumber. Either these kinds of trees, according to the Forest Regulation, were to be sold through auctions, or, if holding auctions was not possible, through a price determined according to the species and measures of trees, and the transport distances and market prices of timber. While determining the value, the officials were to take the consents of the local and central administrations and try to make contracts with the customers. The value of timber either sold in the auctions or by contracts was to be paid in advance.⁵³⁸

In theory, the forest regulation established the state as the sole owner of forest lands except for some private forests, which were few. However, the customary rights were not banned altogether. There were critical lacunae in applying the code. Thus, peasants and other claimants were able to benefit from these vacuums and continue to practice former customary rules. But the group that benefited most was the merchants and contractors. Although the government tried to regulate loggings in village coppices and private forests, the merchants, instead of entering auctions, preferred to arrange agreements with peasants who had rights to cut trees from the state forests by paying a tithe for their personal needs.⁵³⁹

⁵³⁷ Article 11. Ibid.

⁵³⁸ Article 13. Ibid.

⁵³⁹ [Ali Rıza], “Orman ve Mer’u Kanununun Esbab-ı Mucibe Layihası.”

4.3.2.2. Grazing rights and forests

One thing that more or less remained the same in the Bill of 1861 and Regulation of 1870 was forest grazing. Both of these regulations specified the grazing rights that could be exercised in state forests as well as the seasons during which they were to be admitted. Although the experts considered excessive grazing as one of the main causes of forest depredations, the government did not venture to exclude villagers from browsing in state forests.

According to the provisions, the forest administration charged the village headmen (*muhtar*) to inform with a register the forest inspector including the animal species, numbers, and the names of herdowners that the village inhabitants wished to browse within the state forests, situated in the borders of their villages. After having received this register, the forest official was to delimit and determine the specific tracts, the time period and other conditions of grazing within the forest.⁵⁴⁰ The mounted forest guard was to supervise the movement of local inhabitants and animals within the forest. To prevent incursions to other tracts while browsing, the villagers were liable to appoint a shepherd. In case of browsing without permits on disallowed tracts, the owner of the herds was to pay a fine of one *guruş* per animal. The owner also was to compensate for the damages of animals which could not be lower than the fine he was to deliver.⁵⁴¹ If the animals on disallowed tracts belonged to a village herd, these fines would be applied to the shepherd of this village. The herdowners were granted the right to indemnify the fines from the shepherd.

The real change on grazing animals between these two regulations was about the browsing of foreign herds within state forests. For example, according to the

⁵⁴⁰ See Articles 13 and 14 in the Forest Regulation of 1870 “Orman Nizamnamesi.”

⁵⁴¹ Article 43. Ibid.

1870 Regulation, merchants and strangers, who would want to browse their herds in the state forests were to obtain the authorization of the local forest official, who was entitled to determine the forest tracts for grazing. They were also subjected to the payment of a fee in accordance with the existing rules and regulations. But the Bill of 1861 entitled the inspectors to assess a fee, if they thought it was convenient for some reason.

The cattle and sheep found in offence would be seized, unless they belonged to the village's herd, and sold for the account of the public treasury. For the offences of the villages herds, the *muhtars* were held responsible. According to Article 45, if the owner of the herd did not deposit with the muhtar a sum equal to the amount of the incurred damages within three days following the seizure, the Administration was authorized to capture and sell one from every twenty animals. The deposit of the delinquent, paid according to Article 45, would be reimbursed to the owner, if the charges against him proved to be incorrect. As for the cattle sold according to the same article, had the price be lower than the incurred damages, the delinquent would be safe from any further charges.

It is obvious that forest grazing was more or less authorized by the forest administration, though certain procedures had to be followed.⁵⁴² In order to bring the herds into the state forests, the peasants were to get permission from the local forest administration. The aim of this directive was to protect the forest from excess grazing. Also the regulations provided that forest inspectors could limit the number of animals allowed grazing within delimited tracts and imposing the payment of a grazing fee per animal. Nonetheless, in practice, grazing in state forests might have been tolerated on many occasions due to the cost of supervising and patrolling.

⁵⁴² It is interesting to note that the French Forest Code of 1827 forbade grazing in all French forests, except in mountainous regions where grazing was essential to livelihood. Whited, *Forests and Peasant Politics*, passim.

4.3.2.3. Regulation of fellings

The government prohibited cutting trees from the state forests except under certain circumstances written in the provisions of the 1870 Regulation. Logging and removing timber for buildings without licenses taken from the forest officials were banned. The licenses could be issued to any person or persons by name, title, address, and the like. No right was valid in any *miri* forest except the terms and conditions stated in a license issued by the inspector. Timber stemming from the state forests was tagged by forest officials with a special mark before removal. This mark held the place of the certificate of origin. To cut and remove trees from a forest tract before taking the written license of the forest official was fined. For the oak trees, the fines were doubled. Barking and scraping trees were considered as if they had been cut from the root.⁵⁴³

The methods of determining suitable trees for cutting and removing from the forests were also mentioned in the Bill of 1861.⁵⁴⁴ For example, the cutting deciduous trees were licensed only between October 15 and April 15, namely when their sap is withdrawn. In other months, the cutting of those trees depended on special permits. The same period was also articulated in the Article 7 of the Forest Regulation. As for oak trees, special certificates were needed to cut them in any season for stripping their barks. On the other hand, coniferous trees could be logged in any season without permits. This article was not based on scientific principles, as it did not consider the climatic differences in the Ottoman Empire. A special

⁵⁴³ In the absence of the delinquent, the contractor or the owner of the permit were to pay the fine. The fines, changing from 8 to 20 *beşliks*, were determined by the girths and species of the trees in question. The girths were measured from one and a half meters above the ground, but if the tree was cut below this height, it was measured from the point of cutting. For the trees, which girths were smaller than 75.8 centimeters, the fines were determined by the animal load or human load. See the articles 2, 33, and 34 of the Regulation “Orman Nizamnamesi.” The article 39 of the Bill of 1861. BOA, *I. DH.* 33929. The article 133 of the Penal Code.

⁵⁴⁴ See the articles 17 through 24. BOA, *I. DH.* 33929.

instruction was issued on 10 March 1874 to regulate the extraction of resin from the sold out pine trees within the state forests.⁵⁴⁵ It allowed the contractors (*mültezim*) who purchased trees from the state forests to produce resin from the pine trees included in the sale. But, this authorization did not give the contractors any right to ask for a modification in the articles of their contracts signed with the forest administration. Moreover, the contractors were to protect the original forms of decayed trees during the extraction in order not to give harm to their real value, if sold as timber.⁵⁴⁶ For the extraction of resin from pine trees which were not included in the sale contracts, the contractors could extract and produce resin to the degree of perishing the tree in case the trees were decayed. The forest officials were to mark these trees with the *miri* hammers twice. For the standing pine trees the process was a little more complex. The girth of the trees was to be at least 1.20 meters, measured one meter above the ground. Moreover, the extractors were to be careful about not to destruct the natural growing of trees during the extraction process. The extraction of resin from slashes was to begin in April and end on October 1st of each year. But the contractors were permitted to strip the barks of trees from February 15 in order to make trees ready for extraction.⁵⁴⁷ If the contractors did not conform to the liabilities of extraction and gave harm to a pine tree contrary to the methods mentioned in this Instruction, they were to be imposed a penalty according to the 34th and 36th articles of the Forest Regulation. It is clear that the Forest Administration did not deal with the amount and quality of resin, since the equivalent paid for the purchase was calculated over per tree. This measure is more obvious for the farming out, or awarding contracts to the highest

⁵⁴⁵ “Miri Ormanlarında Çam Ağaçlarından Sakız İhracına Dair Orman Memurlarına İ'ta Olunan Ta'limat [Instructions Given to the Forest Officials on the Extraction of Resin from the State Forests],” 26 Şubat 1289/10 March 1874 *Mevzuat-ı Maliye*, pp. 216-18.

⁵⁴⁶ Article 3. *Ibid.*, p. 217.

⁵⁴⁷ Article 6. *Ibid.*

bidder, of timber and resin together. In this case, the methods of extraction and payments were similar to the above mentioned procedures. The price of timber (after extraction of resin) should be assessed for per tree as far as possible. But the price could also be calculated over the volume of timber upon the request of the contractors. The time limit of contracts was generally five years, but they could be extended. The number of trees and the methods of extraction were to be written in the contracts.

The article 7 of the Forest Regulation caused many problems in the course of time because of the untimely fellings of evergreen but non-resinous trees, such as some oak species and boxwood. After several correspondences with the local forest inspectors, the Administration modified the article on 10 December 1894.⁵⁴⁸ According to the new stipulation, the logging of the deciduous trees, except for the *genus Pinus* (pine family) were allowed during the season when the sap was withdrawn according to the specific climate of the region. The logging of coniferous trees and pine trees were allowed in every season by taking the necessary permits from the forest officials. By this modification, the administration made a distinction between the resinous and non-resinous trees and began to consider the climatic differences and local particularities between regions, which can be seen in the Table 8.

⁵⁴⁸ BOA, ŞD. 518/12 (8 Ca 1312/7 Nov. 1894); BOA, ŞD. 520/31 (29 M 1313/22 July 1895).

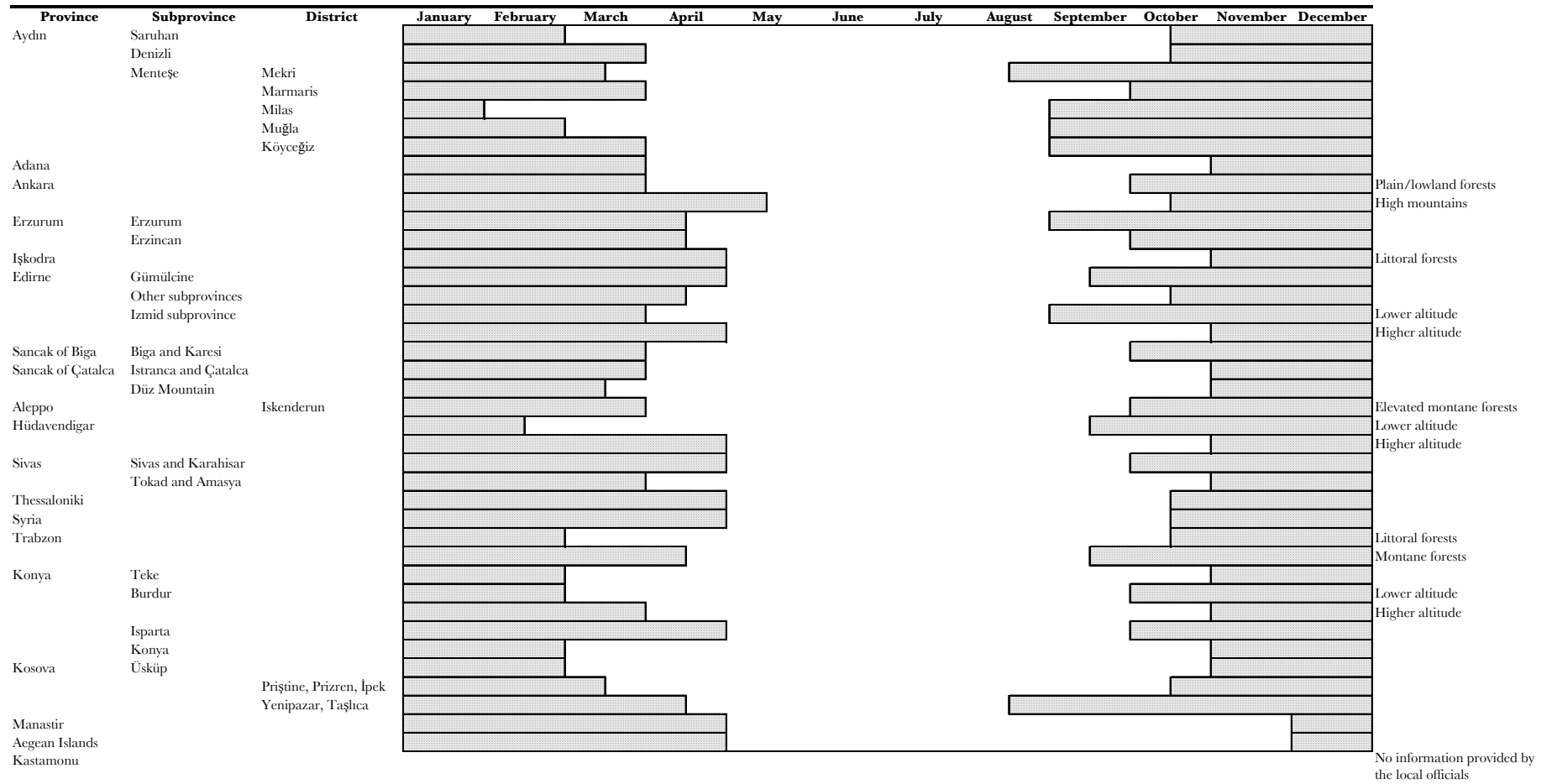


Figure 5: Felling seasons of non-resinous and non-pine trees according to climate and region, 1894. Source: BOA, *ŞD. 518/12*.

4.3.2.4. Charcoal making

The Bill of 1861 stipulated that anybody who wanted to export charcoal or more than one cartload of wood and timber from the borders of a village near a state forest (*miri ormanı bulunan bir karyenin*) was to inform the forest guard about the section of the cutting as well as the destination in order to get an official certificate. Moreover, the person was to obtain a receipt, if the trees were felled from the state forest, for the payment of the price of wood and timber.⁵⁴⁹ The mounted and foot forest guards were to mark the trees removed from the state forests with the *miri* hammer and this mark did substitute for the official certificate.⁵⁵⁰

In 1870, the forest officials were given a more proactive role. They were to demarcate the sites of charcoal burning and designate the trees suitable for firewood and for making charcoal each year.⁵⁵¹ Burning of charcoal by the contractor or the concessionaire in the sites other than those indicated by the forest officials was fined. The fines were payable in cash.⁵⁵²

4.3.2.5. Timber concessions

According to the article 5 of 1861 Bill, a specially designed hammer were to be provided to the forest officials to mark would-be protected trees; to mark felled

⁵⁴⁹ Article 29. BOA, *I. DH.* 33929.

⁵⁵⁰ Article 30. *Ibid.*

⁵⁵¹ Article 8. “Orman Nizamnamesi.” For instructions regulating the sale of wood in the forests of the State, see below.

⁵⁵² Article 46. *Ibid.*

trees; to delimit by marking certain trees for timber storage. The mounted guards were to designate charcoal producing areas by putting special marks on necessary trees with this hammer as well.⁵⁵³ The inspectors were to keep the hammer in a locked case and when necessary the case was to be opened with the accompaniment of mounted and foot forest guards. They were not allowed to use the hammer on their own. After marking the trees, the inspectors were to prepare a warrant/receipt (*ilmuhaber*) of the species and quantity of trees that were marked for protection or for felling. Then the inspectors were to present this receipt to the contractors. The contractors could not commence to fell trees without the written approval of the mounted forest guard. Also they were to pay attention to the written orders and warnings of forest inspectors while cutting and removing trees from the forests.⁵⁵⁴

According to the articles 22 to 24, the forest inspectors, during or after the fellings, and if necessary mounted forest guards as well, were to control and register the quantity and species of felled trees in the presence of both the foot guard and the contractor. Then the inspector was to send the receipts immediately to the governor of the district (*kaymakam*) for charging the necessary taxes and dues. Without a voucher (*makbuz senedi*) stating that the dues were paid, the mounted forest guard could not give a written permit to the contractor to remove either the timber or the charcoal from the forest.⁵⁵⁵

The following three articles (Articles 25-27) defined the procedure for getting felling licenses. The individuals who demanded to cut trees from the state forests were to present a petition to the head official of the subprovince (either *vali*, or *mutasarrif*, or *kaymakam*) mentioning the species, the quantity and the approximate volume of timber as well as the proofs that they were able to pay the price of these trees. The head official, then, was to refer the petition to the forest inspector. The

⁵⁵³ Article 20. BOA, I. DH. 33929.

⁵⁵⁴ Article 21. Ibid.

⁵⁵⁵ Ibid.

forest inspector, after receiving the enclosed petition, could give permission for contracts up to 1000 *guruş*. If the price of timber was more than 1000 *guruş* or there was a ground to deny the license, then the inspector was to refer the matter to the head of the subprovince stating his reasons thereof. On the other hand, the head of the subprovince could grant licenses for the value of timber between 1,001 and 5,000 *guruş*. The head of the subprovince was to inform the Ministry of Trade for the timber above 5,000-*guruş* value. The ministry, on the other hand, could grant licenses up to 100,000 *guruş*. Above this price, the authority belonged to the government. Also, the government might have forced the contractors to pay caution money (*kefalet akçesi*) to ensure that they could be able to pay possible fines against themselves or their workers. This caution money was to be written in the contracts (*mukavele senedi*).⁵⁵⁶ Except for the provision on the caution money, the above stipulations and procedures were also valid for the individuals willing to extract and export stone, soil/earth, tree leaves, resin and other non-timber forest products from the state forests.⁵⁵⁷

In 1870, a couple of provisions on the liabilities of the timber concessionaires or contractors were included to the Regulation. For example, the conditions of sale was regulated by a special contract to which the buyers strictly were to conform. They were to deposit a security money beforehand for executing the terms of their contracts and for paying the condemnations which could be found against them or their workers. In certain cases, the Administration could oblige them to present a solvent guarantor (*kefil-i muteber*) in addition to the security money.⁵⁵⁸ Any violation of the conditions stipulated either by this Regulation, or by other special instructions on the mode of exploitation, for example the extraction of the unspecified products in the contracts, including stones and soil, would be punished

⁵⁵⁶ Article 27. Ibid.

⁵⁵⁷ Article 38. Ibid.

⁵⁵⁸ Articles 11 and 12. "Orman Nizamnamesi."

10 to 20 *beşliks*, apart from the costs of the damage.⁵⁵⁹ The contractors and concessionaires were held responsible for the offences and violations made by their agents and workers on every occasion.⁵⁶⁰ The Regulation also authorized the Forest Administration to confiscate and sell the wood and timber not removed within the time period allowed by the Administration for the account of the public treasury.⁵⁶¹

4.3.2.6. Regulation of coppices

The coppices became subject to administrative regulation for the first time with the 1870 Forest Regulation. The *baltaliks* were defined in the 21st article of the Regulation as the woodlands and forests, which were given to a village or a town from time immemorial with the rights of use and enjoyment. According to the articles of 91 and 92 of the Land Code of 1858, the inhabitants of a village or a town had the right of enjoyment and use from the *baltaliks* assigned to them notwithstanding the objections of other villagers and townspeople. The inhabitants of a village or town could enjoy their *baltaliks* either jointly or individually. But if they exploited them for trade purposes, they were to pay the tithe as they used to be. It is obvious that the government left the administration of these *baltaliks* to the local inhabitants. They were to be jointly responsible from the well-being and protection of their *baltaliks*. The *muhtar* and *zabita* officials were vested to supervise the fulfillment of these liabilities.⁵⁶² The alienation of any *baltalık* by the private individuals either as part and parcel of the land or as an appendage of trees

⁵⁵⁹ Article 42. Ibid.

⁵⁶⁰ Article 51. Ibid.

⁵⁶¹ Article 41. Ibid.

⁵⁶² Articles 25 and 26. Ibid.

on it was strictly forbidden by rules and regulations.⁵⁶³ Also according to the 102nd article of the Land Code, the courts should not pay attention to prescriptive rights in the cases of communal forests. The state made a more encompassing redefinition and restricted the exploitation of the *baltaliks* in the instructions it sent to commissions investigating the usufruct rights of forests on 19 February 1876.⁵⁶⁴ These additional instructions were necessitated because of the widespread disputes among certain villages and towns and the far-flung claims on *cibal-i mubaha* forests in the name of *baltaliks*. During the boundary disputes on *baltaliks* among certain villages, the claimants applied to the local courts and took *hüccet* (judicial entitlement) and *ilam*, or *ilamat-ı şer'iyye* (canonical judgments) clarifying the boundaries of disputed *baltaliks*. But in most of the cases, the local courts gave such titles for *cibal-i mubaha* forests by denominating them as *baltaliks*. The government claimed that the boundaries in these title deeds were usually much larger than the actual boundaries. Referring to the 21st article of the Forest Regulation, the 5th article of the Instruction repeated that *baltaliks* were the woodlands or forests left and reserved *ab antiquo* to a village or a town. They were to be in sufficient quantity for the necessary firewood of the usufructers' everyday needs, for their farm/agriculture implements and for other essential materials. Thus, the government asserted that the titles given by the local courts for *cibal-i mubaha* would not be taken into account as evidence and any claims raised by the inhabitants with these documents were contrary to the rules and regulations and thus would not be heard in the courts. The Instructions also confirmed that any forest or *baltalık* which outstripped the firewood and timber needs of the local inhabitants and other forests that were not in the possession of anybody under the

⁵⁶³ Article 23. Ibid.

⁵⁶⁴ “Ormanların Tasarrufuna Müte'allik Müeddiyatı Tetkik İçin Teşekkül Edecek Komisyonların Muamelatı Hakkında 6 Maddelik Talimat [Instructions Respecting Titles to Forests],” *Düstûr* 1. Tertib, vol. III (23 M 1293-7 Şubat 1291/19 February 1876).

terms of valid titles were to be counted as *cibal-i mubaha* and were to be demarcated and placed under the protection and policing of the Forest Administration.⁵⁶⁵

4.3.2.7. Judicial procedures

According to the Bill of 1861, lawsuits against the offenders would be held in the administrative councils (*meclis-i idare*) of each district within ten days after the committal of the offence. The forest officials were responsible for bringing the necessary evidence before the councils. But if the trials could not commence within three months, they were to be denied automatically by the councils. The same rule was to be applying to court decisions, which were not put into practice within the same time period.⁵⁶⁶

The last section of the Regulation of 1870 dealt with the prosecution, penalties, and sentences. According to Article 27, The *Nizamiye* courts would conduct lawsuits for all offences made in the state and *vakıf* forests, which were subjected to the Forest Regulation.⁵⁶⁷ The forest officials were to present the official reports of the offences to the local authorities without any delay. These official reports were to indicate the names, family names, professions and residences of the delinquents as well as the date of the offence, its nature and the section of forest in which it came into being.⁵⁶⁸ The lawsuits about offences as well as the execution of the sentences were prescribed after the end of three months, beginning with the first day of the offence and the conclusion of the lawsuit,

⁵⁶⁵ Ibid.

⁵⁶⁶ BOA, *I. DH. 33929*.

⁵⁶⁷ “Orman Nizamnamesi.”

⁵⁶⁸ Article 28. Ibid.

respectively. The period of prescription was modified twice until 1917. First, the time period for the commencement of lawsuits was prolonged to one year on 4 December 1913; and then, it was shortened to six months, with an extension for the execution of sentences to one year on 19 March 1917.⁵⁶⁹ The forest officials would be punished according to the Penal Code, if they overlooked these procedures and thus delayed the litigations.⁵⁷⁰

From the beginning, the hidden agenda behind state's concern for forest administration and protection was utilizing forest products for commercial interests. On the other hand, according to one of the foremost Ottoman forest experts of a later generation, namely Ali Rıza Efendi, interpreted the Ottoman concern from a different perspective. For him, the Forest Regulation of 1870 had three basic aims besides making the administration and protection of state forests easy to accomplish and preventing free cutting and collecting of wood. Although the articles were disorderly concurred within the body of the Regulation, the first aim was the designation and demarcation of forests belonging to the state. Second was the banning of illegal cuttings. And third was the apportionment of coppices from state forests to villages in compensation for taking all forests under state's jurisdiction. This last measure, he argued, was of the fundamental nature of the 'spirit' of the Regulation.⁵⁷¹

Ali Rıza claimed that besides these clauses, which adequately revealed the state's concern of a 'good administration and protection,' the Ministry of Finances was entitled to promulgate additional procedures and to create necessary institutions to put the articles of the Regulation into practice.

⁵⁶⁹ *Takvim-i Vakayi*, no. 2833, 2 C 1335/25 Mart 1333 (25 Mart 1917).

⁵⁷⁰ See Article 31. "Orman Nizamnamesi."

⁵⁷¹ [Ali Rıza], "Orman ve Mer'a Kanununun Esbab-ı Mucibe Layıhası," p. 230.

4.4. Supply of the Imperial Shipyard and Artillery

The 1861 Bill contained also provisions for the supply of the timber needed by the Imperial Shipyard. Article 31 and 32 stated that the shipyard and forest officials together were to select and mark suitable trees with the shipyard and forest hammers. The undertakers of felling and transporting of shipyard's timber were subjected to the stipulations and responsibilities enforced to other contractors. They were to fell trees in return for daily wages under the surveillance of shipyard's officials. But the forest officials were to accompany them to prevent possible abuses. These provisions were effective for the timber needs of the Imperial Arsenal as well.⁵⁷²

In 1870, the felling and transporting of timber from the forests of the State, or the *Evkaf*, or the private individuals needed by the Shipyard and Artillery were codified in a special regulation appended to the Forest Regulation.⁵⁷³ According to this appended regulation on the supply of timber to the Shipyard and Artillery, these institutions were given the right of easement (*hakk-ı irtifak*, or *hukuk-ı mücerrede*, such as *hakk-ı mürrur* and *hakk-ı şüf'a*) on the *vakıf* and private forests. However, this right of easement would be valid on forests belonging to private individuals under certain limitations. First, the girth of the trees to be felled from this category of forest must have at least 2 *arşun* measured 1,5 *arşun* above the ground (1 *arşun* is equal to 75.8 cm). Second, the trees on the gardens enclosed with walls and the trees located in front of dwellings were excluded from this right

⁵⁷² BOA, I. DH. 33929.

⁵⁷³ “Tersane ve Tophane-i Amire İdarelerine Muktazi Kerestenin Tedarik ve İ'tası Hakkında Nizamname [Regulation on the Supply of Timber to the Imperial Shipyard and Artillery],” *Düstûr* 1. Tertib, vol. II (11 L 1286-1 K 1285/13 January 1870). *Mevzuat-ı Maliye*, pp. 209-212.

of easement.⁵⁷⁴ However since trees of such dimensions were rare, the government were to pay the actual value of these trees: ‘the silver estimate [of the selected trees] will be made in the presence of owner.’ If the agents of the forest Administration did not manage to get along with the owner on the price of wood, the experts (*ehl-i hibre*) appointed by the local authorities would be charged to fix it and their decision was to be approved either by the Forest Administration, or by the owner.⁵⁷⁵

The felling and transporting of timber from the forests of the State, the *Evkaf*, and the private individuals, needed by the Shipyard and Artillery, were specified in another regulation appended to the Forest Regulation. This second regulation was also issued on the same day. The Regulation abolished the customary practices in which the local inhabitants cut and transported timber to the ports, and instituted the rule that the Forest Administration was solely responsible for the provision and supervision of the necessary supplies of these institutions. From the state and *evkaf* forests, the Imperial Shipyard and Artillery were authorized to demand any kind of timber before March by enlisting the diameters, lengths, and regions of forests and sending the lists to the Forest Administration beforehand. However, for the timber that could be demanded from the private forests, these institutions were to carry out the measures stated in the second section of the Regulation. According to these measures, the trees to be taken from private forests for the use of Shipyard and Artillery were to be at least twenty-four centimeters of girth, measured one and a half meters from the ground. Private gardens closed with walls that were located around the dwellings were excluded from this authorization. Be as it may, the government was to pay the value of the trees obtained from the forests of the pious foundations and private individuals. The prices were to be estimated according to

⁵⁷⁴ Article 11. “Tersane ve Tophane-i Amire İdarelerine Muktaẓî Kerestenin Tedarik ve İ‘tası Hakkında Nizamname.”

⁵⁷⁵ Article 16. Ibid.

the standing values and in the presence of the owners. If a disagreement came into existence on the price of wood and timber between the parties, the experts (*ehl-i hibre*) appointed by the local government would fix it and their decision was to be approved either by the Forest Administration, or by the owner.⁵⁷⁶

4.5. Administration and Management of *Evkaf* Forests

The *vakıf* forests were causing many problems since the establishment of a modern forest administration. The attempts to transform the customary administration of these forests after the Crimean War were doomed to fail in 1859 and 1863, probably because of the opposition of the religious establishment.⁵⁷⁷ On 19 April 1865, a news report in the *Times* announced that a privy council (*meclis-i hass*), under the authority of the Sultan, met to discuss the conversion of all forests, planted grounds and gardens that were controlled by the *vakıfs*. This measure was thought to be the beginning of the secularization of the whole *vakıf* property in the Ottoman Empire.⁵⁷⁸ Nonetheless, in 1867, the rules of inheritance were rearranged in accordance with the memorandum of Fuad Paşa to Abdulaziz, where he

⁵⁷⁶ Ibid.

⁵⁷⁷ Davison, *Reform in the Ottoman Empire, 1856-1876*, pp. 258-59. On the economic, social, and cultural aspects of *vakıf* institution in general, see especially: Nazif Öztürk, *Türk Yenileşme Tarihi Çerçevesinde Vakıf Müessesesi* (Ankara: Türkiye Diyanet Vakfı, 1995); Bahaeddin Yediyıldız, *Institution du vaqf au XVIII^e siècle en turquie: étude socio-historique* (Ankara: Editions ministere de la culture, 1990). For a brief evaluation of these studies, see: Nadir Özbek, *Osmanlı İmparatorluğunda Sosyal Devlet: Siyaset, İktidar, Meşruiyet (1876-1914)* (İstanbul: İletişim, 2003), pp. 23-26. A bibliographic article on *vakıf* studies can be found in: Tahsin Özcan, "Osmanlı Vakıf Hukuku Çalışmaları," *Türkiye Araştırmaları Literatür Dergisi* 3, no. 5 (2005). For a theoretical analysis of *vakıf* institution by a famous Ottoman jurist, see: Nazif Öztürk, ed., *Elmalılı M. Hamdi Yazır Gözüyle Vakıflar* (Ankara: Türkiye Diyanet Vakfı, 1995).

⁵⁷⁸ "Turkey," *The Times*, 21 April 1865, Issue 25165.

mentioned also some reform proposals on the property regime.⁵⁷⁹ However, the religious establishment again opposed to the secularization of whole *vakıf* property and thus it was postponed until 1873, when the reform project surfaced again.

As stated earlier, *vakıf* lands were basically of two kinds: real/legal (*sahih*) and customary (*gayr-i sahih*). Over the course of time, abuses accumulated to the extent that the system became a burden for the administration, especially in the reform period of the nineteenth century. For example, the illegal conversion of state lands into *vakıfs* became customary, since the *vakıfs* were exempted from most types of taxes.⁵⁸⁰ Despite this exemption, the government also bestowed a considerable sum of money for religious and educational purposes each year. Moreover, the *vakıf* system, despite the disadvantage caused by the absence of direct heirs, provided the founder with a solid ground against the confiscation of property. Especially in the capital, a large part of private property was transferred to pious foundations. For the other regions of the Empire, it was estimated that almost two thirds of the whole land already had become *vakıfs* by the nineteenth century.⁵⁸¹ The reform of the secularization of the *vakıf* property was aimed also at resolving the problems of transactions, caused by the transfer of land and trees and buildings on it, by converting the property into freehold. This last measure was believed to increase the revenues of the treasury as a fee would be received before the conversion into freehold and taxation would be imposed thereafter.⁵⁸²

Article 4 of the Land Code divided the *arazi-i mevkufe* into two categories. The first was the *arazi-i mevkufe-i sahiha*, the grounds of which were really *arazi-i memluke* (freehold) by their origin, but which were made *vakıf* by the fulfillment of the requirements prescribed by the *shari'a* (religious law). The eminent domain

⁵⁷⁹ Davison, *Reform in the Ottoman Empire, 1856-1876*, p. 236, 256, and 260.

⁵⁸⁰ *Ibid.*, p. 257.

⁵⁸¹ *Ibid.*

⁵⁸² *Ibid.*, p. 258.

(*rakabe*) and all rights of ownership/disposal of these grounds belonged to the administration of the *vakıf*. They were not regulated by civil law (*kanun*), but according to the conditions established by the founder. The Land Code did not concern itself with this category of *vakıfs*. The second category was the grounds, which were separated/allotted from the *arazi-i miriyye* (state/public property) and converted into *vakıfs*, either by the direct endowment of the Sultan or by another individual's endowment with sovereign authorization. Since the deed of trust (*vakfiyye*) of this kind of *vakıfs* was only granted by the government from a portion of the public revenues, such as the tithe and other taxes, this kind of *vakıfs* were thus not real *vakıfs* (*evkaf-ı sahiha*). The majority of the *vakıfs* in the empire were of this kind. And like the *arazi-i [e]miriyye-i sırf* (the lands merely and originally *arazi-i miriyye*), the eminent domain (*rakabe*) of the *arazi-i mevkufe* of the category of 'tahsisat,' which became *vakıfs* as a consequence of a special allocation of occupancy, depended on the *beytü'l-mal* (public treasury). This means that the provisions of the Land Code could be applied to them. But as was the case in the *arazi-i miriyye*, the public revenues—such as the transfer and inheritance taxes (*resm-i ferağ ve intikal*), and the price of acquisition of the escheated grounds (*bedel-i mahlulat*)—which were paid to the public treasury, were also being disbursed to the administration of these category of *arazi-i mevkufe*. Basically, the provisions of the Land Code pertaining to the state lands (*arazi-i miriyye*) were only applicable to this category of *arazi-i mevkufe*. Lastly, this category of *arazi-i mevkufe* was divided into two subcategories in itself: 1) the tithe and other taxes belonged to the state, but the usufruct rights were allotted to the *vakıfs*; and 2) both the tithe and other taxes and the right of usufruct were assigned to the *vakıf*. The provisions of the Code relating to the transfer and inheritance were not applicable to such subcategories of *vakıf* lands, but they could be either cultivated by the *vakıf* itself, or disposed by way of leasehold, provided that the revenue was being

enjoyed according to provisions of the founder.⁵⁸³ Likewise, the Article 19 of the Forest Regulation acknowledged that the benefits from the revenues of the forests attached to the pious foundations of ‘*tahsisat*’ category belonged to the founder, and thus the trustee of the *vakıf*. But looking at Article 20, we see that the forests included in the *evkaf-ı mazbuta* were subject exclusively to the supervision of the Forest Administration. The fellings, sales, and other exploitations would conform to the same provisions of the Forest Regulation as was stated for the state forests. These forests were to comply with the rules and regulations that would be published thereafter. It seems that the Regulation bypassed a very important matter; that is, the administration of *vakıf* forests. However, Article 20 was a harbinger of a rather overbearing and more detailed regulation. Finally, with the Enactment on the Administration of *Evkaf* Forests on 2 November 1876,⁵⁸⁴ the government attempted to resolve the problems caused by the complications in the administration and management of pious foundations’ forests. This was a last resort for the government because it could not make the cadastral surveys of these forests since the promulgation of the Forest Regulation.

Except for some long-established pious foundations, called ‘*müstesna*’ (excepted),⁵⁸⁵ the government (in effect, a subcommittee of ministers), with the approval of the Ministry of Pious Foundations, decided that henceforth, the forests of the *evkaf-ı mülhakka* (pious foundations administered by a trustee as long as the

⁵⁸³ Belin, “Etude sur la propriété foncière,” pp. 295-97.

⁵⁸⁴ “Evkaf Ormanlarının Suret-i İdaresine Dair Kararname [Enactment on the Administration of Vakıf Forests],” *Düstûr* I. Tertib, vol. IV (14 L 1293/2 November 1876).

⁵⁸⁵ These exceptional pious foundations were Celaliye, Hacı Bektaş-ı Veli, Abdülkadir Geylanî, Hacı Bayram-ı Velî, Gazi Mihal, Gazi Evrenos, Gazi Ali, and Gazi Süleyman. Şener, *Osmanlı Vergi Sistemi*, p. 183fn255. There were 14 similar müstesna vakıfs existed during the codification of this Enactment, which were abolished with another regulation on 24 Ş 1307/15 April 1890: “Bade’-t-Tanzimat Tevarih-i Muhtelifede İstisna Olunan Evkafın İlga-yı İstisnaiyyetiyle Aşarının Bedele Rabtı Hakkında Nizamname,” *Düstur*, cilt 6 (Ankara, 1939). Şener, *Osmanlı Vergi Sistemi*, p. 183.

accounts and transactions were audited and supervised by the accountants of the Ministry of Pious Foundations) and *evkaf-ı mazbuta* (pious foundations managed by the accountants of the Ministry of Pious Foundations following the dissolution of the trusteeship) as well as the forests of the pious foundations of the category of ‘*tahsisat*’ would be administered and supervised directly by the Forest Administration. These *vakıf* forests were to conform to the articles on the state forests mentioned in the Forest Regulation. Moreover, for the timber needed by the Shipyard and Artillery from these forests, Article 19 and 20 of the same regulation would be utilized.⁵⁸⁶ The following articles were concerned with the taxes which were to be received from these forests.

According to Article 1, from the forests originally attached to a pious foundation, but in practice possessed by any private individual by way of leasehold, the Forest Administration was entitled to receive tithe from the timber and other produce, stamp tax from the firewood, and charcoal as if these forests were private property/freehold. They could not levy on the aforementioned forests any other tax in the name of forest tax.⁵⁸⁷

On the other hand, Article 2 stated that the forest tax (*orman hakkı*) and the stamp tax (*pul resmi*) were to be received, like they were charged from the state forests, from the forest products obtained from the *mazbut* and *mülhak* pious foundations in accordance with the instructions and special tariffs.⁵⁸⁸

Article 3 of the instruction made explicit the collection of the forest tax taken from the products of the *mazbut* and *mülhak vakıf* forests. The tax were to be received on the monetary value (*kıymet-i nakdiyye*) after deducting from it the tithe which was payable to the local financial offices (*mal sandıkları*). From the remaining amount, the Forest Administration was to receive the 10 percent to cover

⁵⁸⁶ “Evkaf Ormanlarının Suret-i İdaresine Dair Kararname,” p. 442.

⁵⁸⁷ Ibid.

⁵⁸⁸ Ibid., p. 443.

its expenses and then the surplus was to be given to the *vakıf* accountancy. For example, the 10 *guruş* of the 25 *guruş*, received from the 100-*guruş* value of timber extracted from a forest one-to-five distance according to the Tariff of Forest Tax, was paid as the tithe. The 10 percent of the remaining 15 *guruş* was for covering the expenses of the Forest Administration and the surplus 13,5 *guruş* was the right of the *vakıf* accountancy. This means that from these categories of *vakıf*, the 54 percent of the overall forest tax was to belong to the *vakıf*, and thus the remaining 46 percent returned to the central administration. However, this also means that with the increase of the distance, the share of the *vakıf* regressively decreased.⁵⁸⁹ On the other hand, the stamp tax that was received from these forests were to enter as a receipt to the account of the central treasury.⁵⁹⁰

4.6. Forests Outside the Domain of Forest Administration

Although the Forest Administration designed this Instruction for managing the forests in the provinces that had not been yet placed under administration, the provisions of this Instruction also rendered twenty-two articles of the Forest Regulation more explicit.⁵⁹¹

The first article was a compendium to the 5th article of the Regulation. By this article, the administration further limited the usufructuary rights of village inhabitants apart from the ones defined in the 5th article. To make firewood and

⁵⁸⁹ Ibid., p. 443.

⁵⁹⁰ Article 4. Ibid., p. 443-44.

⁵⁹¹ “Ormanları Taht-ı Idare ve Inzibata Alınmayan Vilayata Mahsus ve Orman Nizamnamesini Müfessir 10 Maddelik Talimat [Instructions to Provinces in Which the Woods and Forests Had Not Been Placed Under a Regular Administration],” 17 L 1292-4 T 1291/16 November 1875). HK, *Doc. No. 251* (17 L 1292/16 November 1875.). These articles were: 5, 7-9, 10, 11, 13, 14, 16, 27-29, 33, 34, 36, 39-43, 47, and 52. “Orman Nizamnamesi.”

charcoal for domestic purposes, the inhabitants were to gather dead and dry tree pieces lying on the ground or cut dried or decaying trees. If ever there were no such trees existing within the forest, then they were allowed to cut any appropriate tree. For example, to prevent forest fires, charcoal burning was to be held in open and empty forest tracts.⁵⁹² This rule was presumably demanded from all parties. But, it was not very clear whether the administration required them to observe the other procedures demanded from contractors. For example, deciduous trees, like oak, hornbeam, beech, and elm, could be cut between October 15 and April 15, meaning when saps were withdrawn. But wounded and infested trees could be cut in any season for producing timber, wood, and sleepers, and also for cleansing/clearing forests. Old, decaying, and densely populated evergreen resinous trees, like pine, fir, and etc., could be cut in any season unless sufficient seed trees were saved for replanting.⁵⁹³

As a supplement to the 9th, 10th, and 11th articles of the Forest Regulation, the administration strictly warned the local officials to ensure that trees were to be sold piecemeal regarding their standing value and be tied to lucid contracts, arranged between the local administrations and the contractors. The price of each tree was appraised by the species or by the quality of the objects to be produced from them. It was the responsibility of the officials to write down the prices and the method they used to calculate them in the contracts. Moreover, the administration established a fixed proportion (5 or 10 percent) for the security money to be paid in advance and also submittal of a solvent guarantor by the contractors.⁵⁹⁴

Concerning the seed growing forests (*şahdan sürecek ormanlar*), the administration prohibited the cutting of trees younger than fifteen years of age. For

⁵⁹² See Article 8 of the Forest Regulation of 1870. “Orman Nizamnamesi.”

⁵⁹³ Refer to the modifications on 10 December 1894, which outdated this and the 7th article of the Forest Regulation. BOA, *ŞD. 518/12*.

⁵⁹⁴ See Article 4 in: HK, *Doc. No. 251*.

trees older than fifteen years, it was permissible to cut trees by keeping as reserve eight-to-ten robust and flat oak trees per *dönüm*, equally distanced from each other by a square distribution.⁵⁹⁵

Besides the provisions mentioned in the 34th article of the Forest Regulation, harming trees for touchwood and resin production, felling sappy trees for tar producing, and picking up buds of resinous trees were also prohibited. The offenders were to be punished according to the provisions of the Regulation. Moreover, the officials were not allowed to give licenses for stripping the barks of any standing tree.⁵⁹⁶

The last article of the Instruction (Article 10), concerning the taxes to be taken from trees and forest products, did not add much to the Forest Regulation. It legalized only the tithe that was to be taken from the wood sold in the nearby markets of towns and cities. If the villagers demanded to transport timber and firewood to outlying localities, they were subjected to arrange a contract before cutting and transporting timber and firewood.⁵⁹⁷

4.7. Private Forests and Ownership Rights

In accordance with the 2nd article of the Forest Regulation, a separate Instruction was issued on 19 February 1876 to determine the conditions of ownership in private forests, which aimed also to be a precedent for the proposed forest cadastres.⁵⁹⁸ The Instruction was also a supplement to the 1858 Land Code.

⁵⁹⁵ Article 5. Ibid.

⁵⁹⁶ Article 8. Ibid.

⁵⁹⁷ Ibid.

⁵⁹⁸ “Ormanların Tasarrufuna Müte’allik Müeddiyatı Tetkik İçin Teşekkül Edecek Komisyonların Muamelatı Hakkında 6 Maddelik Talimat [Instructions

With the promulgation of this Instruction, commissions were established under the auspices of governor-generals (*vali*) and governors (*mutasarrıf*) and under the chair of forest inspectors in the provincial centers and subprovinces. These commissions also included *vakıf* accountants, Land Registry (*Defter-i Hakani*) officials, and local experts (*erbab-ı vukuf*). The commissions were entitled to look after property disputes on forest lands. The main task was to summon title deeds (*senedat*) and examine their validity in conformity with existing rules and regulations. The imperial decrees (*evamir-i aliyye*), canonical entitlements and decisions (*hücec ve ilamat-ı şer'iyye*), and titles granted by unidentified *sahib-i arz* (i.e. *sipahis*, *mültezims*, and *mütesellims*) implying disputes over forests were not authentic documents of possession. The commissions were to abate the claims resting upon such feigned title deeds by the so-called possessors.⁵⁹⁹

The authentic title deeds (*senedat-ı mutebere*) that accurately limited the *dönüms* and boundaries of forests and groves (*koru*) and given before the issue of the Forest Regulation on 13 January 1870 were excluded from investigation. The ones with *dönüms* and boundaries incompatible with the factual situation were to be separated so that the forest inspectors could later delimit the actual boundaries and take the deed temporarily under custody. From the date of the promulgation, giving original title deeds to forest and groves was prohibited.⁶⁰⁰

The Instruction also tried to resolve the complications caused by the forests within the boundaries of summer and winter pastures, meadows and agricultural fields, wherein the owners obtained title deeds in the past. The commissions were

Respecting Titles to Forests].” Promulgated in: *Takvim-i Vekayi*, no. 1839, 9 N 1293/28 September 1876.

⁵⁹⁹ Article 4 says: “*Fasl-ı niza’ı mutazammın evamir-i ‘aliyye ve hücec ve ilamat-ı şer’iyye ve gayr-i ma’ruf sipahi ve mültezim ve mütesellim senedatı orman tasarrufu için nizamen senedat-ı mu’tebere den addolunamıyacağından bu makule ihticaca gayr-i salih senedat ile ormanlara iddi’a-i tasarruf idenlere komisyonca kat’iyyen cevab i’tası iktiza idecektir.*” Ibid.

⁶⁰⁰ Ibid. Article 2.

to consider these forests as arable fields, as though having no trees. Then, they were to first estimate how much crop could be yielded from these ‘imaginary’ fields and fix a reasonable tithe proportion that could be received from them. Third, they were to apply this rate to the amount of *dönüm* of forests and allocate a definitive annual forest tax. Upon these calculations, the examination commissions, in return, could grant new titles to these forests. But until the allotment of the forest tax and allocations of title deeds, the administration warned the officials not to transfer the right of utilization of trees to the possessors of such forests on pastures, meadows and agricultural fields.⁶⁰¹

Another important measure of the Instructions was the registration of title deeds. Before confirming the titles with compatible *dönüms* and boundaries owned as forests and groves after 1870, the commissions were to prepare and send to the Forest Administration a detailed register of the dates of entitlement, the names of the title holder and of the official who had granted the title, and the reasons of entitlement, whether assigned newly or in exchange, and whether transferred by sale or inheritance.⁶⁰²

The Forest Administration also attempted to resolve the questions concerning the coppices (*baltahks*). According to the Forest Regulation, the *baltahks* were to be in sufficient quantity to supply the demands of household needs, of agricultural implements and other equipments of village or town inhabitants. But from time to time, the Forest Administration encountered multiple claims arising from boundary disputes over *baltahks*. In the past, such conflicts were resolved temporarily after one of the parties obtained canonical entitlements and documents from the local administrations, or imperial decrees restricting the other parties’ right of usufruct. But usually there emerged multiple titles to the same *baltalık* in the course of time. Based on the boundaries written in these documents, the local people could lay

⁶⁰¹ Ibid. Article 2.

⁶⁰² Ibid. Article 3.

claim on large *cibal-i mubaha* forests tracts in the name of *baltalık*. The instruction reminded that according to the Articles 11 and 23 of the Forest Regulation, these claims could never be heard in the courts. Thus, the forests and *baltaliks*, which were in excess of the firewood and usufruct needs of village and town inhabitants and which were not in the possession of individuals with authentic title deeds, were regarded as *cibal-i mubaha* and immediately were to be designated and taken under administration and state jurisdiction.⁶⁰³

Overall, this system of title deed registration did not produce the results that the government intended to achieve. The membership structure of the title deed commissions left the forest inspectors almost at the mercy of the land registry officials and local experts. In most of the cases, as we will see in Chapter 5, if there was no valid certificate of proof, the boundaries of any forest land was defined by the evidence of witnesses, like village elders, *muhtars* (village headmen), or *imams* (prayer leaders). Especially after 1880s, the land registry officials granted various title deeds to the contrary of the provisions of this Instruction.⁶⁰⁴

4.8. Forest Taxation

Until the issue of a special regulation, the firewood and charcoal transported for provisioning Istanbul was exempted from taxation. For the taxation of timber sent to Istanbul, the Forest Administration issued a separate Instruction. This was a preliminary adjustment before the Instructions issued on 19 April 1876 (see below).

⁶⁰³ See Article 5. Ibid.

⁶⁰⁴ BOA, *DH. MKT. 1369/81* (3 M 1304/2 October 1886); BOA, *DH. MKT. 1377/42* (12 S 1304/10 November 1886); BOA, *DH. MKT. 1495/19* (5 B 1305/18 March 1888); BOA, *DH. MKT. 1521/78* (5 Za 1305/14 July 1888); BOA, *Y. PRK. OMZ. 1/14* (29 Z 1300/31 October 1883). BOA, *DH. MKT. 1584/100* (14 Ca 1306/16 January 1889).

This Instruction was also a supplement to the 13th article of the 17 May 1871 Instruction.⁶⁰⁵ The clauses applied to the timber, firewood and charcoal cut and burned either from the forests of the State and *Evkaf*, or from village and town coppices, or from forests held by private individuals.⁶⁰⁶ The merchants, who carried and sold timber, firewood, and charcoal on sea or river wharfs, or at railway stations were to pay a forest tax (*orman hakkı*) before transporting them to Istanbul and other provinces. The rates of this tax were determined as follows:

Table 12: Tax rates on firewood and charcoal

	Cartload (256 kg)	Horseload (128 kg)	Donkeyload (64 kg)
	<i>guruş</i>	<i>guruş</i>	<i>guruş</i>
Firewood	1.00	0.50	0.25
Charcoal	2.00	1.00	0.50

For one cartload of firewood weighing 200 *okkas*, the seller would pay 1 *guruş*; for a cartload of charcoal carriage weighing 200 *okkas* (about 256 kilograms), 2 *guruş*; for a horse-load of firewood weighing 100 *okkas* (about 128 kilograms), 0.5 *guruş* (20 *paras*); for one horse-load of charcoal of an equal weight, 1 *guruş*; for a donkey-load of firewood weighing 50 *okkas* (about 64 kilograms), 0.25 *guruş* (10 *paras*); and for one donkey-load of charcoal of an equal weight, 0.5 *guruş* (20 *paras*).

This was perhaps the most important regulation in terms of the revenue-seeking objective of the Forest Administration. It systematized the taxes taken from

⁶⁰⁵ [Ali Rıza], “Orman ve Mer’â Kanununun Esbab-ı Mucibe Layıhası,” p. 231. See Section 4.3.2.1 “Free delivery of forest products” above.

⁶⁰⁶ “Dersaadet ve Bilad-ı Saireye Nakl Olunmak Üzere Bahr ve Nehr İskeleleri ile Demiryolu Mevkiflerine Tenzil ve Furuht Olunan Odun ve Kömürden Ahz u İstifa Olunacak Resme ve Bu Resmin Suret-i İstifasında İsti’mal Olunacak Pullara ve Bunların Sarfına Dair Talimat [Instructions on the Taxes to Be Taken from Wood and Timber Alighted and Sold in the River and Sea Ports and Railway Stations that Were to Be Exported to Istanbul and Other Provinces],” *Düstûr* 1. Tertib, vol. III (15 Ra 1291/2 May 1874).

almost all kind of forest produce.⁶⁰⁷ There were mainly two kinds of taxes taken from timber, firewood and charcoal extracted from all types of forests. The first was the *orman hakkı* taken from the timber, firewood and charcoal extracted from the *miri* forests and *vakıf* forests of the ‘*tahsisat*’ category (*arazi-i mevkufe-i gayr-i sahiha*). The second was the *öşr* (tithe) received from all kinds of timber and the stamp tax (*pul resmi*) taken from the firewood and charcoal of the private forests and village *baltalıklar*.⁶⁰⁸

The *orman hakkı*, then again, was divided into two. The first was the tax taken from the price of the trees sold in the auctions or by contracts.⁶⁰⁹ The second was the tax (*orman hakkı*) taken from the inhabitants of villages located close to forests according to the provision expressed in the third article.

These inhabitants were to pay both a forest tax and a stamp tax for the trade-oriented timber of any kind, which were less than eight *ziras* (about 6 meters) in length and eight *parmaks* (about 25 centimeters) in width and thickness. Again, for trade-oriented firewood and charcoal, they were to pay an *orman hakkı*, apart from the stamp tax, on the local market price in accordance with the special tariff issued as a supplement to the 5th article of the Forest Regulation.⁶¹⁰ (see Table 13 below).

⁶⁰⁷ “Ale’l-Umum Ormanlardan Çıkarılan Kereste ve Hatab ve Kömürlerden Ahz u İstifa Kılınacak Rüsumat ile Mukabilinde Sarf Edilecek Tezakir ve Pulların Enva’ına ve Rüsumatın İstihsal ve Tezakirlerin İsti’maline ve Tedkik ve Kontrollerine Dair Talimat [Instructions Regarding the Kinds of Taxes to Be Levied on Wood, Stamps, and the Manner of Collection] “*Düstûr* 1. Tertib, vol. III (7 Nisan 1292/19 April 1876). Also in: *Mevzuat-ı Maliye*, pp. 219-224.

⁶⁰⁸ “Dersaadet ve Bilad-ı Saireye Nakl Olunmak Üzere Bahr ve Nehr İskeleleri ile Demiryolu Mevkiflerine Tenzil ve Furuht Olunan Odun ve Kömürden Ahz u İstifa Olunacak Resme ve Bu Resmin Suret-i İstifasında İsti’mal Olunacak Pullara ve Bunların Sarfına Dair Talimat.”

⁶⁰⁹ According to the 6 and 12 articles of the Regulation, the officials determined these trees either by marking them with the *miri* hammer after calculating the standing values or by delimiting a certain forest stand for selling at the auctions. See: *Ibid.*

⁶¹⁰ *Ibid.*

The timber, wood and charcoal that the inhabitants of villages neighboring forests cut and burned either belonged to the State, or depending upon *vakıfs* of the *tahsisat* category⁶¹¹ were exempt from any taxes, imposed by the 2nd article, but only under certain conditions. For example, such inhabitants would not pay any royalty for timber, firewood, and charcoal if they used them for necessary construction of their dwellings, granaries, barns, or for producing essential needs of their households and all agricultural implements. Likewise, these same villagers could cut firewood and make charcoal in the aforementioned forests, and transport it to various markets, but only on their own carriages or pack animals, where they would sell them directly to the inhabitants of cities and towns. But, when the timber, wood and charcoal were sold in cities and towns or to great consumption centers, like factories and quarries or other similar establishments which could make profit from these items, or when they are carried to wharfs on sea or river or to railway stations which can be used as outlets for trade, then villagers were to pay all the necessary taxes, namely the forest tax and the stamp tax (*pul resmi*).⁶¹²

The tax on timber, wood and charcoal, cut and exported from forests belonging to private individuals or from coppices reserved for villages and towns, was also of two kinds:

1. The tithe, 10 percent on the price of any kind of timber in general;
2. Stamp tax, 20 *paras*⁶¹³ for 100 kilograms of firewood, and 40 *paras* for the same amount of charcoal. The stamps used for taxation were published as 10, 20 and 40 *paras* pieces. For larger cargos, like rafts, ships, and train

⁶¹¹ See the article 91 of the Land Code in Section 4.2.2. “Forest Classification and Access Regime in the Land Code.”

⁶¹² Article 3. “Dersaadet ve Bilad-ı Saireye Nakl Olunmak Üzere Bahr ve Nehr İskeleleri ile Demiryolu Mevkiflerine Tenzil ve Furuht Olunan Odun ve Kömürden Ahz u İstifa Olunacak Resme ve Bu Resmin Suret-i İstifasında İsti’mal Olunacak Pullara ve Bunların Sarfına Dair Talimat.”

⁶¹³ 1 *guruş* is equal to 40 *para*.

carriages, the stamps of 10, 50, 100, 500 and 1000 *guruş* stamps were to be used. These stamps were to be applied to wood and charcoal drawn from the forests of the State, the private individuals, and coppices reserved for villages alike.⁶¹⁴

While receiving the taxes mentioned in the preceding articles, two kinds of certificates (*tezkere*) were demanded. The first one was the certificate/license of transport (*müruriyye*), used for timber extracted from the forests of the State and *vakıfs* of the *tahsisat* category, and for firewood and charcoal, from which, in addition to the stamp tax, also a forest tax was to be taken. The second certificate, called tithe certificate (*öşr tezkeresi*) was employed for the timber exports from the forests of private individuals, or from those reserved for the villages.⁶¹⁵

The forest officials or in their absence, tax officials (*rüsumat memurları*), and in their absence, local municipal police (*zabıta*) were authorized to confiscate the timber, wood and the charcoal for which there were no certificates, or whose quality and quantity would differ from the ones written in the certificate. But they were to inform immediately the inspector of the forests about the confiscation. The confiscated timber, wood and charcoal would be regarded as smuggled goods, and from the surplus that was not written in the certificates, a double of the fixed tax would be taken.⁶¹⁶

For any species of timber, wood and charcoal, conveyed from one sea port to another, or to Istanbul, the carrier was to provide the certificate, or license, to prove that the forest tax or the stamp tax was paid. If the timber, wood or charcoal had arrived at a port without the valid certificates or licenses, then forest, customs or

⁶¹⁴ “Dersaadet ve Bilad-ı Saireye Nakl Olunmak Üzere Bahr ve Nehr İskeleleri ile Demiryolu Mevkiflerine Tenzil ve Furuht Olunan Odun ve Kömürden Ahz u İstifa Olunacak Resme ve Bu Resmin Suret-i İstifasında İsti'mal Olunacak Pullara ve Bunların Sarfına Dair.”

⁶¹⁵ Article 6. Ibid.

⁶¹⁶ Article 10. Ibid.

administrative officials of the place in question were to sequester these goods and demand double the amount of regular tax. They were to inform the forest inspectors and the governors about the situation if the ‘smuggling’ has occurred in a province, and the general directorate of forests, if it took place in the ports of Istanbul.⁶¹⁷

If another person other than these government officials reported the authorities about the timber, wood and charcoal brought over without official certificates of proof, the informer would be able to get the one-fifth of the double tax received from the fraudulent.⁶¹⁸

Table 13: Rates of Forest Taxation (*Orman Hakkı Tarifesi*) on timber, firewood, and charcoal

Distance in hours* (1 h ≈ 3,5 km)	Timber	Firewood and Charcoal
1-5	25%	12%
5-10	20%	8%
10-15	15%	6%
15-20	12%	4%
Above 20	10%	2%

*Distances were measured from the forest in question to towns and cities and to outlet ports of nearest river, or sea and railway stations.

The rates were arranged by retail prices of timber, firewood, and charcoal. The auction prices were excluded. They were valid only for commercial products. Except for the stamp tax of firewood and charcoal, the rates were to be calculated from the cash value of the product in the destination place rather than the place of origin. Despite the detailed rates of forest taxes, they were almost uniform everywhere, regardless of the distance from the place of production to that of consumption. This uniformity sometimes affected purchasers interest in forest products.⁶¹⁹

One of the major problems of the Forest Administration was the delivery of timber exempted from taxation. For example, the timber needed for school

⁶¹⁷ Article 11. Ibid.

⁶¹⁸ Article 12. Ibid.

⁶¹⁹ Cuinet, *La turquie d’asie*, vol. 5, pp. 28-29.

construction and administration of which belonged solely to the religious communities, and for mosques and churches, which did not have a *vakıf* of its own, was provided by the Forest Administration.⁶²⁰ The government extended the use of this right to other mosques, and to graves, unless it opened the door to abuses. Moreover, the timber to be used in these places was to be entirely obtained from residual trees.⁶²¹ The necessary timber for renovating public schools and for constructing private houses damaged by fire was exempt from taxation upon the appeal of local councils of administration (*meclis-i idare*).⁶²²

The timber used in the reparations and constructions of military buildings was also exempt from taxation by a decree from the Grand Vizierate on 17 April 1893.⁶²³ But the military departments were not authorized to begin fellings before the official reports of species, dimensions, quantity, and estimated prices of timber arrived to the forest administration.⁶²⁴ It seems that the forest officials dragged out the cutting and transporting of timber demanded by the military departments, even after they presented official reports. To solve the problem, the Forest Administration sent a dispatch to the provinces stating that the inspectors were to enable the demands of the military agencies as far as possible.⁶²⁵

Free delivery of timber needs for the construction of state departments, military buildings, and houses for settled immigrants, and cargo ships (*sefain-i ticariyye*) extended to some railway lines around 1900. But, they were to cut trees

⁶²⁰ *Muharrerat-ı Umumiyye*, no. 57, 25 Şubat 1302/9 March 1887.

⁶²¹ *Ibid.*, no. 10, 25 Haziran 1303/7 July 1887.

⁶²² *Ibid.*, no. 21, 21 Temmuz 1300/2 August 1884.

⁶²³ *Ibid.*, no. 40, 25 Haziran 1309/7 July 1893. The same order was issued again on 28 Mart 1318/10 April 1902.

⁶²⁴ *Ibid.*, no. 54, 22 Temmuz 1309/3 August 1893 and no. 9, 9 Mayıs 1310/21 May 1894.

⁶²⁵ *Ibid.*, no. 37, 12 Eylül 1310/24 September 1894.

from *miri* forests in the neighborhood on their own. If the technical capacity of contiguous forests was not adequate for their demands, then the forest officials were asked to inform the ministry about suitable forests.⁶²⁶ At the end of the nineteenth century, timber exempted from taxation annually reached around to 10 millions cubic meters:

Table 14: Volume of timber exempted from taxation in state forests, 1897.

Destination	Volume (m3)	Percentage
Imperial Shipyard	4,648,977	47
Military buildings	2,367,160	24
Imperial Arsenal	1,566,122	16
Public buildings	985,000	10
Merchant ships	350,249	4
TOTAL	9,917,508	100

Source: Güran, *1897 İstatistik Yıllığı*, p. 132.

Although contrary to forest rules and regulations, sometimes the timber used for the construction of public buildings in towns and cities were exempted from taxation by the voluntary dispositions of local administrative officials. Eventually, the Forest Administration cautioned these officials against the illicit delivery of timber to such buildings without taxation.⁶²⁷ The mainstay of these local practices was essentially the 5th article of the Forest Regulation, which prescribed the village inhabitants to obtain timber from state forests freely for their essential needs. But the article did not give the same right to trade-oriented timber.

The firewood and charcoal produced in the forests of Mount Athos were exempt from taxation as well. But the Forest Administration entitled the local forest officials to give transport permits (*mürur tezkeresi*) to the products of these forests on their own.⁶²⁸

⁶²⁶ Ibid., no. 44, 28 T 1316/11 December 1900.

⁶²⁷ Ibid., no. 6, 13 Nisan 1316/26 April 1900.

⁶²⁸ Ibid., no. 33, 2 Ta 1302/14 October 1886.

4.9. Conclusion

The management and use of natural resources were not mere outcomes of legal ownership or property status. Better understanding of them necessitates looking at how different social groups and institutions seek their own way to establish control over “a wide array of regional resources.”⁶²⁹ Although cultural and symbolic meanings attributed to forest by local people were difficult to discern, it is obvious that with the coming of the new definition of forest, these meanings were also subjected to change.

In the pre-industrial period, rules and ways of access to various forest categories were different than the access regime under modern forestry. Except for the reserved forests of the major state institutions and forest needed for the working of mines, nearly all forests in one way or another were open to utilization.

After the introduction of the Forest Regulation, the peasants were forced to remain self-supporting as before, as in the case of traditional subtracting forest products and grazing, but this time within the allotments and tracts/routes segregated from the state forests by the Forest Administration.

The officials and administrators in the localities, who had been in informal partnerships with traders, with whom they were making deals in the auctions for forest products, met the post-1860s forest policies with opposition. These were secret contracts, about which the central government knew nothing about. The Bosnia case demonstrates this. The central government tried to create a legal competitive order by putting the cahier des charges in effect. This regulation was intended to break the monopoly of local traders and to force them to obey the law, but the 5th article, legalized free access for villagers with customary rights, of the Forest Regulation served to enable them to make deals with individual peasants.

⁶²⁹ Rangan, *Of Myths and Movements*, p. 179.

The 1876 directive closed this loophole but did not suffice to end the abuses of local traders. Bricogne expresses the situation when he says: “The greed and ingenuity of these traders is such that they would have no qualms about marketing the wood cut by the common folk for their subsistence needs.”⁶³⁰ The auction procedure opened another door to collusion/corruption as well. These were instituted with later directives, and there was no mention of auctioning in the Forestry Regulation or in its preamble. Auctioning of wood at fixed or contracted prices was risky on its own right, since the traders could rather enter into contracts with the common people who could cut wood for trade purposes by paying only the tithe. This practice was completely overlooked in the Regulation.⁶³¹ In the preamble of the Regulation prepared by the Council of State, the common people were obliged to pay for the value and the tax due from the cuttings they made from the *miri* forests and obey the rules of the Regulation together with merchants and tax-farmers. When the state uses the expression *miri orman* or state forest, it means that “all its revenue belongs to me, no one else can claim a right over its use or profit.” As such, it legally excludes all other claims of revenue and ownership.

Significantly, the 1870 regulation began to use the category of state forests in lieu of the phrase *miri* forest. *Miri* forest primarily referred to forests reserved to supply the demand of the Imperial shipyard. These were mostly close to the shores and at places not far from the center shipyard. Yet there were also extensive forests in the provinces far from the center and in the Mediterranean region. As restricting the concept of *miri* to these forests and leaving out the *cibal-i mubaha* was considered to be contrary to public interest, the category of *miri* forests was replaced with the term state forests.⁶³² Yet notwithstanding its theoretical

⁶³⁰ Bricogne, *Ormançılık Heyeti*, p. 9.

⁶³¹ [Ali Rıza], “Orman ve Mer’a Kanununun Esbab-ı Mucibe Layıhası,” pp. 235-37.

⁶³² *Ibid.*, pp. 240-41.

justification, the concept of state forest lost all its practical meaning, as it could be determined only by boundary settlement and limitation. The Forest Regulation did not describe what constituted a forest but merely included a provisional directive to set the boundaries. Due to persistence of the customary notion considering only the forests with big tress supplying the shipyard as *miri*, the Forest Administration often failed when it went to the local courts challenging private cuttings from the young-tree forests for purposes of obtaining wood and charcoal. Defenses such as “the forest in question is not *miri* forest; since trees there are not suitable for the Shipyard” or “I cut not from the *miri* forest but from *cibal-i mubaha*” could be upheld by the courts.⁶³³

The Forest Regulation left the matter of usufruct rights of private forests to Land Code, and thereby accepted that the material benefits would belong to the owners. Yet deeming their immaterial benefits public, the regulation considered the prevention of their destruction by the owners as being of public interest. Similarly, the protection of the coppices and the regulation of fellings were also reckoned within the competency of the forest administration.

⁶³³ Ibid., p. 242.



Map of Ottoman Provinces, c 1900. Source: İnalçık and Quataert, *An Economic and Social History*.



Map of Ottoman railways and paved roads. Source: Güran, 1897 *İstatistik Yılığ*.

CHAPTER 5

LIMITS TO FOREST MANAGEMENT AND ADMINISTRATION

5.1. Introduction

After the end of this codification process, the Ottoman government attempted to encourage European capitalists to undertake the construction of roads and railways, the working of mines and forests, and other industrial enterprises, which could develop of the resources of the country. It was also said that the government was promising liberal policies and that the Council of State was less jealous about the European capital and ready to introduce more reforms on this occasion.⁶³⁴

However, the visionary schemes of government, foresters' internal representation of the Ottoman forests and the institutionalization of a system for forest administration and management did not match with the material conditions of Ottoman forestry. Neither the codifications nor the institutionalization of forestry satisfied the Ottoman government's eagerness of maximizing revenues. The story of management of forests as a resource in the Ottoman state enters into a rather complex stage in the period between the introduction of the Forest Regulation in 1870 and the First World War. Concisely, this experience was a failure to record, manage and financially exploit the forest resources. Notwithstanding its attempts, the state could not manage to draw up a sound picture of its forest resources as an

⁶³⁴ "Turkey," *The Times*, 23 July 1878, Issue 29314.

economic asset. This was a process through which the Ottoman state gradually lost its capacity to control its natural resources while trying to have firmer grip on them.

The global economic crisis and the decline of prices hit Ottoman agricultural and forest products harshly. The adversary factors included the Russo-Ottoman War of 1877-78, resulting in the loss of major Balkan territories and a heavy war indemnity. It was under such conditions that the Ottomans tried to develop forestry. In the previous chapters, I have tried to illustrate some of the problems that the Ottoman state faced during its endeavor to establish a 'rational' forest administration. This Chapter will discuss some other factors that hindered the development of forestry in the Ottoman Empire.

The Ottoman government could not establish equilibrium between the rationalization of forestry and the commercialization of forest products due to a host of problems. These problems were intrinsically related with the codification of rules and regulations, lack of a sufficient professional and technical cadre, an effective transportation system, and foreign investment due to difficulties caused by above problems and alike. In addition to these, the maximization of revenue purposes surpassed other objectives of forestry for some time. But in due course of time, the maximizing of revenue objective intersected with the objective of maximizing sustainable yield, thus putting more economic and technical pressure on the management of forests.

The economic and administrative roles attached to the Forest Administration burdened the officials with the difficult task of tallying companies and contractors' commercial interests and state's protective measures at the same time. This two-sided role of the Forest Administration also conditioned its policies and achievements in different subperiods. Sometimes its economic role got the upper hand, sometimes administrative. Thus, the economic-financial (maximizing revenue) and the administrative-economic (maximizing protection) functions interchangeably dictated the policies of the administration. As soon as the forest

administration was able to establish a reasonable balance between these functions, it became more powerful to exert its pressure on timber contractors and companies. If these agents realized that the economic-financial concerns were dominant in a certain period, they tried to do their best to benefit from the conditions. On the other hand, local people were rather resistant during the dominance of the administrative-economic objectives. It seems that when the protective measures surpassed commercial concerns, local people tended to exploit forests more than before. This was partly because of their relatively better positions in this period. As such, in terms of commercial interests timber merchants and contractors benefited more than petty loggers, villagers, and peasants.

Besides, throughout this process, timber and fuel wood remained to be the primary sources of energy, due to the insufficient use of substitutes. Moreover, the government tried to harmonize state's financial concerns with the necessities of Imperial Shipyard and Arsenal, the subsistence needs of local people, and the demands of timber merchants. For example, the aim of achieving a balance between the interests of the state and those of local people was in fact transformed over time into a tension, which created problems for the forest administration. But the administration did not have necessary and sufficient instruments to satisfy such multiple interests. Firstly the Ottoman government did not yet have a fundamental geographical knowledge of its forests. There were almost no cadastral maps of forest land, except for some disputed and contested ones. All of these elements came together to curb the power of forest administration *vis-à-vis* other state institutions and social groups—including the religious establishment, local powerholders, peasants, merchants, and contractors.

5.2. Forest Extent, Revenues and Problems

Collecting statistics was an important function of modern states. The statistics are necessary for administrative order and administrative order was necessary for compiling statistics.⁶³⁵ However, presenting them in a workable inventory was even more important. The Forest Administration held the collection of facts about forests by entrusting them to the forest inspectors in the provinces. The specific historical context of the development of forest statistics is important to understand how the statistical information was presented and how the Ottoman state made use of them in its projections of forestry. Forest statistics produced by the state depicted them as an entity that could be measured and valued according to the spatial and material factors. They also reflect the quantitative outlook of state, though often intercepts with qualitative appraisals, with respect to natural resources.

The statistical information presented by the forest administration represented the contradictions between the expectations of the government and the realities on the ground. These statistics gave information on the numerical descriptions of forest wealth and revenues as well as expenses but they were far from being truthful. They were mainly compiled for economic reasons and were not 'scientific' and definitive. Even the government itself did not trust to the quality of the numbers and figures. Thus, it seems that the officials often ignored the choice of building their policies upon the knowledge acquired from these statistics. They remained almost solely on paper, but were also used as a source for taking a snapshot of a balance sheet of forests. In fact, by the end of the nineteenth century, the forest administration as well as the government still wrapped up in commercial concerns,

⁶³⁵ For an excellent evaluation of this point, see: Silvana Patriarca, *Numbers and Nationhood: Writing Statistics in Nineteenth-Century Italy* (Cambridge and New York: Cambridge University Press, 1996).

in which the main function was believed to be the production of revenue from forests and the presentation of the statistical data by the Ottoman state.

From these statistics, nonetheless, it is possible to get valuable information on the estimated area distribution, approximate revenues and expenses, the condition of roads, and some punctual information on cuttings and production. Except for the ones provided by the French experts, the earliest accessible statistical description of forests belonged to the year 1306 (1890), which was arranged during the finance ministry of Agop Paşa (1889-1894). More detailed data on the extent of forests, production and consumption, export and import of forest products, and staff distribution in the provinces were published by the Ministry of Trade and Public Works in the *First General Statistical Yearbook of the Ottoman Empire* in 1313 (1897).⁶³⁶ The second general statistics on forest was held in 1322-23 and the Directorate of Statistics of the Ministry of Forests, Mines, and Agriculture published it after the 1908 Revolution on 20 April 1326/3 May 1910.⁶³⁷ The real agenda of this latter statistics was to arrange an administrative order. It was admitted that they were designed mainly for economic reasons. They were not conform to the scientific principles and not definitive either. The director of the Statistical Bureau confessed that had the cadastres been completed and scientific production methods been applied, forestry would be developed under better conditions. The commencement of this year's statistics was entrusted to the forest inspectors in the provinces, but the Ministry did not get what was expected apart from the problems occurred during the compilation. The extent of forests that there were under the jurisdiction of the Ministry was estimated to be 8,803,765 hectares (See Table 15). The total area of the provinces, which included within the domain of Forest Administration, was 911,250 square kilometers. Thus, the forest lands

⁶³⁶ Güran, ed., *1897 İstatistik Yıllığı*, pp. 175-182.

⁶³⁷ Ticaret ve Zira'at Nezareti. İstatistik Genel Müdürlüğü, *Memalik-i Osmaniyenin 1325 Senesine Mahsus Orman İstatistikidir* (İstanbul: Mahmut Bey Matbaası, 1329 [1913/14]).

corresponded to 9.66 percent of the total land surface. The proportions of each category of forests can be seen in Table 15. However, if we compare the figures of 1906 with the ones for 1897, we will see that there were serious discrepancies, especially with respect to the surfaces of the provinces.⁶³⁸

As seen in Table 15, while the largest proportion of forests in total forest area can be observed in Aydın, Bursa-Biga-Karesi, Kastamonu and Thessaloniki; Çatalca, Edirne, Istanbul, Izmid, Kosova, Manastir and Trabzon are also significant according to the proportions of forests to total land. According to the data, a general trend of decrease in forest area is recognized between 1897-1906. But among all, especially Aegean Islands are considerable with over 60 percent drop as the largest failure of forest area. The others were either increased or decreased slightly. Since the figures for Biga, Karesi, and Bursa do not coincide from 1897 to 1906, a single category is preferred to show the trends between these years. Detailed figures for each can be found at the end of Table.15.

The data on hectares of forest per head shows that Aydın, Bursa-Biga-Karesi, Izmid, Kastamonu and Thessaloniki are above the country average in 1897. Although decrease in hectares of forest per head in 1906 is common for all regions, Aydın case is significantly interesting because that amount drops drastically from 1.09 in 1897 to 0.54 in 1906. The population of Aydın did not increase as much. So when we interpret these numbers, decrease on hectares of forest per head is the result of either the destruction of forests, or the change of administrative boundaries, or misrepresentation of data in 1906 by the officials.

⁶³⁸ Compare the figures in: Güran, ed., *1897 İstatistik Yıllığı*, pp. 181 and Ticaret ve Zira'at Nezareti. İstatistik Genel Müdürlüğü, *Memalik-i Osmaniye'nin 1325 Senesine Mahsus Orman İstatistikidir*.

Table 15: Forest area and hectares of forest per head by province, 1897 and 1906.

Province	Land Area (ha)		Population		Forest Area (Ha)		Proportion of forests in total forest area		Proportion of forests to land		Hectares of forest per head	
	1897	1906	1897	1906	1897	1906	1897	1906	1897	1906	1897	1906
Adana	7,160,000	4,000,000	398,764	504,396	337,500	420,655	3.55	4.78	4.71	10.52	0.85	0.83
Aegean Islands	637,200	1,450,000	387,318	364,223	95,000	49,218	1.00	0.56	14.91	3.39	0.25	0.14
Aleppo	11,724,800	7,860,000	921,345	867,679	64,600	81,900	0.68	0.93	0.55	1.04	0.07	0.09
Ankara	9,841,600	7,500,000	1,018,727	1,157,131	62,400	215,625	0.66	2.45	0.63	2.88	0.06	0.19
Aydın	8,969,600	5,700,000	1,534,229	1,727,281	1,672,000	929,208	17.60	10.55	18.64	16.30	1.09	0.54
Beirut	2,475,200	3,050,000	623,505	562,719	22,000	47,000	0.23	0.53	0.89	1.54	0.04	0.08
Bursa-Biga-Karesi	10,293,200	7,590,000	1,746,140	2,327,732	1,746,654	1,571,362	18.38	17.85	16.97	20.70	1.00	0.68
Çatalca	190,000	390,000	61,236	61,236	23,000	50,455	0.24	0.57	12.11	12.94	0.38	0.82
Edirne	6,435,600	4,250,000	986,446	1,133,796	200,824	426,878	2.11	4.85	3.12	10.04	0.20	0.38
Erzurum	8,036,800	-	687,322	-	75,000	-	0.79	-	0.93	-	0.11	-
Istanbul and surr.	-	250,000	-	864,662	-	43,000	-	0.49	-	17.20	-	0.05
Işkodra	2,016,000	1,080,000	337,584	89,848	83,000	88,300	0.87	1.00	4.12	8.18	0.25	0.98
Izmid	1,478,400	1,205,000	228,529	290,507	397,600	334,800	4.18	3.80	26.89	27.78	1.74	1.15
Janina	3,117,600	-	517,274	-	58,000	-	0.61	-	1.86	-	0.11	-
Jerusalem	1,513,600	-	264,317	-	8,500	-	0.09	-	0.56	-	0.03	-
Kastamonu	7,331,200	6,000,000	968,884	1,121,516	1,505,000	1,316,076	15.84	14.95	20.53	21.93	1.55	1.17
Konya	15,894,400	9,160,000	1,022,844	1,249,777	754,645	480,368	7.94	5.46	4.75	5.24	0.74	0.38
Kosova	4,419,200	3,290,000	954,634	671,653	245,000	379,000	2.58	4.30	5.54	11.52	0.26	0.56
Mamuretü'l-aziz	4,600,000	-	566,656	-	25,000	-	0.26	-	0.54	-	0.04	-
Manastir	4,413,600	2,850,000	1,061,522	824,828	225,400	352,800	2.37	4.01	5.11	12.38	0.21	0.43
Sivas	9,888,000	8,370,000	980,982	1,194,372	165,800	302,075	1.75	3.43	1.68	3.61	0.17	0.25
Syria	9,980,800	10,000,000	701,134	478,775	14,000	72,875	0.15	0.83	0.14	0.73	0.02	0.15
Thessaloniki	4,771,200	4,000,000	1,040,218	921,359	1,422,520	1,146,170	14.97	13.02	29.81	28.65	1.37	1.24
Trabzon	3,789,400	3,130,000	1,164,827	1,342,778	282,500	496,000	2.97	5.63	7.46	15.85	0.24	0.37
Zor	12,209,600	-	151,260	-	15,000	-	0.16	-	0.12	-	0.10	-
TOTAL	151,187,000	91,125,000	18,325,697	17,756,268	9,500,943	8,803,765	100.00	100.00	6.28	9.66	0.52	0.50
Biga and Karesi	1,152,000	2,460,000	288,061	636,455	367,200	664,000	3.86	7.54	31.88	26.99	1.27	1.04
Bursa	9,141,200	5,130,000	1,458,079	1,691,277	1,379,454	907,362	14.52	10.31	15.09	17.69	0.95	0.54

Source: after Güran, *1897 İstatistik Yıllığı*, p. 177 and HK, *Doc. No. 298*, pp. 360-61.

Forest administration always expressed a discontent about the revenue increase that did not achieve an expected percentage from 1870s. However, when we look through the statistics, it is clear that there was a steady increase of forest revenues between 1890 and 1900 (see Table 16). Revenues have reached to 21,504,292 *guruş* with a 68 percent increase in 1897 from 12,805,154 in 1890. But at the same period, except for the expense of 4,347,786 *guruş* for the year 1894, average yearly expense was around 3,5 million *guruş*. While we dig into the proportional data, forests that generated the highest net revenue per hectare were Adana, Aydın, Izmid, Kastamonu, Konya, and Sivas. But it is noteworthy that there is a significant decrease in Sivas during the year 1894. Forest revenues classified within the direct taxes in the 1906 statistics, whereas they had been categorized among the indirect taxes since 1874/75.⁶³⁹

From the surveys conducted by the French specialists until the end of the 1890s, the figures in the statistical tables of the Forest Administration indicate a significant increase in the total area of state forests. That is, over a period of 30 years, the state laid its hands on a significant amount of forests. The Forest Administration achieved this outcome by using the traditional mean of survey by forest inspectors in the localities rather than modern cadastres. An important factor in this overall increase was the annulment of the title deeds issued before the Forest Regulation of 1870.

⁶³⁹ (For a brief information on the Yearbook, see: Güran, ed., *1897 İstatistik Yıllığı 1897*, pp. xvii-xxi.

Table 16: Revenues, expenses, and productivity of forests by province in 1890, 1894, and 1897.

	Revenue (piasters)			Expense (piasters)			Estimated Area (ha)		Revenue per ha			Expense per ha			Revenue/Expense			
	1889	1890	1894	1897	1890	1894	1897	1890	1897	1890	1894	1897	1890	1894	1897	1890	1894	1897
Adana	880,200	892,024	1,770,961	1,871,871	204,900	217,792	206,750	337,000	337,500	2.65	5.25	5.55	0.61	0.65	0.61	4.35	8.13	9.05
Aegean Islands	-	61,454	51,406	48,732	41,700	47,110	42,350	95,000	95,000	0.65	0.54	0.51	0.44	0.50	0.45	1.47	1.09	1.15
Aleppo	-	122,016	241,461	232,383	51,300	62,917	51,900	35,000	64,600	3.49	3.74	3.60	1.47	0.97	0.80	2.38	3.84	4.48
Ankara	159,900	168,753	179,014	194,930	53,500	64,166	69,500	30,000	62,400	5.63	2.87	3.12	1.78	1.03	1.11	3.15	2.79	2.80
Aydın	-	1,783,913	2,272,772	2,311,012	296,700	360,134	305,750	2,372,000	1,672,000	0.75	1.36	1.38	0.13	0.22	0.18	6.01	6.31	7.56
Baghdad	-	-	131,976	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Basra	-	-	638	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Biga w. Karesi ¹	-	908,365	723,703	1,595,543	327,900	179,023	331,300	367,199	367,200	2.47	1.97	4.35	0.89	0.49	0.90	2.77	4.04	4.82
Bingazi sancağı	-	-	10,941	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bursa ²	-	610,184	1,418,939	773,442	210,300	444,272	212,800	1,379,454	1,379,454	0.44	1.03	0.56	0.15	0.32	0.15	2.90	3.19	3.63
Çatalca	-	230,280	262,166	358,769	142,420	89,030	143,700	23,250	23,000	9.90	11.40	15.60	6.13	3.87	6.25	1.62	2.94	2.50
Diyarbakır	230,140	-	-	-	-	7,000	-	-	-	-	-	-	-	-	-	-	0.00	-
Edirne	-	829,250	1,437,094	1,452,712	284,700	270,309	288,000	200,874	200,824	4.13	7.16	7.23	1.42	1.35	1.43	2.91	5.32	5.04
Erzurum	273,700	113,400	114,712	119,676	48,700	53,646	49,250	91,660	75,000	1.24	1.53	1.60	0.53	0.72	0.66	2.33	2.14	2.43
Istanbul and surr.	-	-	279,762	-	-	115,310	-	-	-	-	-	-	-	-	-	-	2.43	-
Işkodra	-	106,593	302,369	287,232	77,700	67,856	78,250	414,000	83,000	0.26	3.64	3.46	0.19	0.82	0.94	1.37	4.46	3.67
Izmid	-	1,149,234	1,049,639	1,390,883	242,700	180,282	246,200	396,360	397,600	2.90	2.64	3.50	0.61	0.45	0.62	4.74	5.82	5.65
Janina	-	-	40,310	-	-	-	-	-	58,000	-	0.70	-	-	-	-	-	-	-
Jerusalem	-	-	-	-	-	-	-	-	8,500	-	-	-	-	-	-	-	-	-
Kastamonu	1,750,000	2,547,023	4,094,827	4,499,650	383,100	419,614	409,550	1,505,000	1,505,000	1.69	2.72	2.99	0.25	0.28	0.27	6.65	9.76	10.99
Konya	-	889,416	4,110,956	3,122,102	249,300	771,953	356,300	754,645	754,645	1.18	5.45	4.14	0.33	1.02	0.47	3.57	5.33	8.76
Kosova	-	303,688	283,849	312,073	109,300	99,445	110,150	245,000	245,000	1.24	1.16	1.27	0.45	0.41	0.45	2.78	2.85	2.83
Mamuretül-aziz	-	-	10,579	-	-	-	-	-	25,000	-	0.42	-	-	-	-	-	-	-
Manastır	-	232,878	418,625	426,265	102,700	143,225	141,700	51,272	225,400	4.54	1.86	1.89	2.00	0.64	0.63	2.27	2.92	3.01
Musul	-	-	64,206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sivas	-	310,369	232,676	317,495	47,700	203,272	48,200	150,000	165,800	2.07	1.40	1.91	0.32	1.23	0.29	6.51	1.14	6.59
Syria and Beirut	-	169,111	210,911	301,312	93,900	104,963	94,750	22,000	36,000	7.69	5.86	21.52	4.27	2.92	6.77	1.80	0.71	3.18
Thessaloniki	-	897,614	866,426	1,176,333	284,700	257,829	253,950	2,022,520	1,422,520	0.44	0.61	0.83	0.14	0.18	0.18	3.15	3.36	4.63
Trabzon	284,550	479,589	608,406	711,877	174,100	177,624	176,900	282,020	282,500	1.70	2.15	2.52	0.62	0.63	0.63	2.75	3.43	4.02
Van	1,108	-	2,251	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	1,136	-	-	-	-	-	-	-	-	-	-	-	-
Zor	-	-	4,534	-	-	9,878	-	-	15,000	-	0.30	-	-	0.66	-	-	0.46	-
TOTAL	3,579,598	12,805,154	21,196,109	21,504,292	3,427,320	4,347,786	3,617,250	10,774,254	9,500,943	1.19	2.23	2.26	0.33	0.46	0.38	3.74	4.88	5.94
Bursa-Biga-Karesi	-	1,518,549	2,142,642	2,368,985	538,200	623,295	544,100	1,746,653	1,746,654	0.87	1.23	1.36	0.31	0.36	0.31	2.82	3.44	4.35

Source: after BOA, *Y. PRK. OMZ. 1/33*; Cuinet, *passim*; Güran, *1897 İstatistik Yılığ*, pp. 181-82.

¹ Figures pertain to Biga for the year 1894.

² Figures include Karesi for the year 1894.

5.3. Forests and Cadastral Surveys

The Forest Administration, beginning with the promulgation of the 1870 Forest Regulation, had been very eager to map the forests to determine and fix the state ownership rights. The geographical information gathered by the surveys were deemed to be inadequate, since they did not present the results too much different from the land surveys (*tahrirs*) of the sixteenth to eighteenth centuries. Although we see certain preliminary attempts for drawing forest maps prior the Regulation,

One of the earliest known attempt is, Ömer Paşa's mapping of some parts of the Bosnian forests. This was realized during his extraordinary mission in Bosnia-Herzegovina, when the local governor was executed and illegal connections between local powerholders and Austrian timber merchants exposed (see Chapter 3). The central government ordered that:

[A]s it is necessary to know the qualities of the forests in the region in order to have them registered at the Imperial Registry and since the governor general [Ömer Paşa] has the skilled engineers in his retinue, [it has been decided] to give the said governor general a special duty for the inspection of all the forests in the area, whether they be state property or private property, so that the health and size, metes and bounds of each forest, and the qualities of their trees, and the reputation and the name of the forest possessors is made known to us and if possible, the maps of all, and if not, at least of the principal ones and of those near to the [Austrian] border are sent to us.⁶⁴⁰

Ömer Paşa appointed two military engineers, an Austrian convert, Emin Jufsboscki and an Ottoman officer, Hüseyin Şemseddin, and an engineer topographer, Abdullah İdris for the job. They completed the cadastral mapping of Bosnia and Herzegovina forests, and then Ömer Paşa sent them immediately to the government. However, these maps was seemed to be lost. On a dispatch to the

⁶⁴⁰ BOA, *A. MKT. MVL. 50/98*.

ministries of Trade, Military Affairs and Council of Navy, the Grand Vizierate mentioned that the maps of Bosnian forests could not be found and asked whether they were in their archives.⁶⁴¹ Although the government had to rely on these cadastral maps in deciding what to do with contracts pertaining to Austrian merchants, neither of these institutions knew where the maps were.

The cadastral survey of forest lands could not be accomplished also due to the inefficiency in the application of the 1859 *Tapu* Law, which was enacted for the implementation throughout all the provinces of the Empire. For example, when the British took on the administration of Cyprus in 1878, the land registration was seemed to be in a chaotic state. One of the British officials reports that:

When the intention of a British Occupation was made public, there was a rush to obtain fraudulent title deeds. The extent of this plunder, may be imagined from the fact that 40,000 such documents were awaiting the necessary signatures when, by the arrival of the British officers, the Turkish authority, who could not sign the deeds with sufficient expedition, was dismissed and the outstanding false deeds were invalidated.⁶⁴²

“*Tapu* registrations had been issued, but, in the absence of cadastral surveys and adequate administrative machinery, could never contain detailed boundaries,” reported Colonel Warren, Chief Commissioner of Limassol. Warren’s descriptions on forest conditions in Cyprus provides us an impression of an ‘extreme looseness’ of boundaries and landmarks:

The Cypriote can generally encroach upon any land adjoining him, should it belong to the state. Every season he can drive his plough a few paces further... until by degrees he succeeds in acquiring, a considerable accession. The state is the sufferer to an enormous extent by many years of systematic invasion. Forest land has been felled and cleared by burning, and the original site is now occupied by vineyards.... The absence of defined boundaries has facilitated these encroachments.... The vague definitions in title deeds, which simply mention the number of donums,

⁶⁴¹ BOA, *A. MKT. NZD. 64/37* (27 M 1269/10 November 1852).

⁶⁴² Sir Samuel Baker, *Cyprus as I Saw It in 1879* (London: MacMillan, 1879). Quoted in: J. V. Thirgood, *Cyprus: A Chronicle of Its Forests, Land, and People* (Vancouver: University of British Columbia Press, 1987), p. 4?.

affords no means of proving an unjust extension; such terms as “the woods bounded by a hill” or “the woods bounded by uncultivated land” ... leave a margin of frontier that is practically without limit, within a yard of his nearest neighbour. Some holders of land whose titles show ninety donums, lay claim to ten times the area ... all facilitated and connived at by venal officials. Many of these extended holdings had been inherited, in other cases they had been more recently acquired.⁶⁴³

The above statements bear a gist of the two perspectives on the organization of the land: topocentric and geocentric. The former defines the boundaries of land through certain landmarks and nodes, or with ‘fuzzy’ boundaries. To put another way, the land is organized around specific points, such as water, land, trees, fields, hills, or mountains. Since the boundaries are defined loosely, there may be a variety of overlapping rights which claim possession over the same land. This situation may have also happened on the regions where land abounds. The second perspective, the geometric, requires clear boundaries and attaches importance to maps. This corresponds to the cartographical view of land and underlies the modern European concept of “appropriation by strict division of land.”⁶⁴⁴

Mainstream studies on the development of capitalism usually begin with a statement of the economic conditions in northwest Europe in the sixteenth century, and continue to discuss the pace of three hundred years of European ascendancy *vis-à-vis* the rest of the world. Most of these studies either neglect to elaborate the conditions in non-Western societies or to compare them with the developments in the West. One reason for this negligence is the assumption that the non-Western states, even in the nineteenth century, did undertake land surveys, but failed to produce cadastral maps (the cartographic records of property ownership) that were the symbols of state power, or ‘rational government’.⁶⁴⁵ Hidden behind this is the

⁶⁴³ Quoted in: Thirgood, *Cyprus: A Chronicle*.

⁶⁴⁴ Leonard and Longbottom, *Land Tenure Lexicon*, p. 22.

⁶⁴⁵ Roger J. P. Kain and Elizabeth Baigent, *The Cadastral Map in the Service of the State: A History of Property Mapping* (Chicago: University of Chicago Press, 1992), pp. 332-42.

idea that non-Western state and societies were unaware of the power of maps in statecraft, since the cadastral mapping spread to other regions of the world through a process of imperialism and colonialism.⁶⁴⁶

Even for industrialized countries in the nineteenth century, however, cadastral mapping was a very expensive endeavor depended on highly skilled professional surveyors. In the Ottoman Empire such kind of skilled men, for a long time, were employed only in the military. Those very few employed in the civil cadres were attached to Imperial Registry. Many of them were probably retired soldier-engineers. The Ottoman government had been undertaking land surveys for taxation purposes at least from the early fifteenth century onwards, and made surveys to determine economic income (*temettu'at* surveys) after the Tanzimat.⁶⁴⁷ However, it could not develop them into a systematic recording and registration of land, including forests. The income surveys of the early Tanzimat period may be considered as the forerunner of cadastral mapping in the future. The effectiveness of land surveys was dependent on the centralizing reforms of the Tanzimat era. In this context, it was not surprising that regional powerholders and local governmental officials challenged the Ottoman efforts in individual cadastral mappings. The augmentation of overlapping and contested claims on land after the introduction of 1858 Land Code made the situation even more complex.⁶⁴⁸ Due to such adverse conditions, cadastral mapping emerged in the Ottoman Empire, but could not develop into an empire-wide scale. In this context, it would be more meaningful to understand the process of utilizing sporadic land surveys that can be categorized as cadastres. French experts utilized similar surveys in forest lands as well. However, except for some disputed forest tracts, there was no large-scale

⁶⁴⁶ Even Kain and Baigent falls into this trap. *Ibid.*, pp. 265-330.

⁶⁴⁷ For a discussion of these surveys in this context, see: Islamoğlu, “Property as a Contested Domain,” *passim*. and Islamoğlu, “Politics of Administering Property,” *passim*.

⁶⁴⁸ Islamoğlu, “Property as a Contested Domain,” pp. 26-39.

mapmaking activity in the Ottoman Empire. Moreover, since there were no clear property boundaries on forest lands, the extent of forest surfaces remained as estimates only. In these estimates percentages of state forests were always interpreted as being above 80 percent. Thus, state ownership was uncertain and complex. However, Bernhard says that mostly in unsurveyed forest tracts ownership was blurred.⁶⁴⁹

The nonexistence of reliable plans and maps, or title deeds of many forest lands in the 1860s made the initial investigations and surveys rather difficult. Bricogne claimed that the documents in hand were far away from reflecting actual realities.⁶⁵⁰

The existing title deeds were not particularly helpful for forest surveys, since the individual parcels in forests used for agricultural purposes or for vineyard cultivation were not clearly demarcated in these documents.

By defining boundaries and drawing maps of the forests preceding cadastral surveys, the forest specialists, in effect, were calculating the standing value of the timber. On the other hand, the Ottoman government's aim was to define the ownership of forest lands, though extracting revenue from forest products remained to be their main concern.

Can we consider the practice of cadastral mapping totally lacking in the Ottoman Empire? In fact, when a problem occurred in a forest area, or when a certain forest tract was disputed, or contested, the Ottoman government sent an inspector to that location and demanded the preparation of maps of the contested forest. These maps were used as a physical evidence of state's claims over such forest stands.⁶⁵¹ These were, in a sense, sporadic forest surveys, though systematic

⁶⁴⁹ Bernhard, *Türkiye Ormancılığının Mevzuatı*, p. 111.

⁶⁵⁰ Bricogne, *Ormancılık Heyeti*, p. 7.

⁶⁵¹ BOA, *T. OMI. 1693/17* (14 N 1305/24 May 1888); BOA, *T. OMI. 1696/28* (5 S 1325/19 March 1907). BOA, *T. OMI. 1695/13* (c. 1327/1909).

surveys remained to be desired. For example, the following map was drawn after the conflict occurred on the contracted tracts at the Ikizce forest in Bayramiç (Biga) around the early twentieth century.

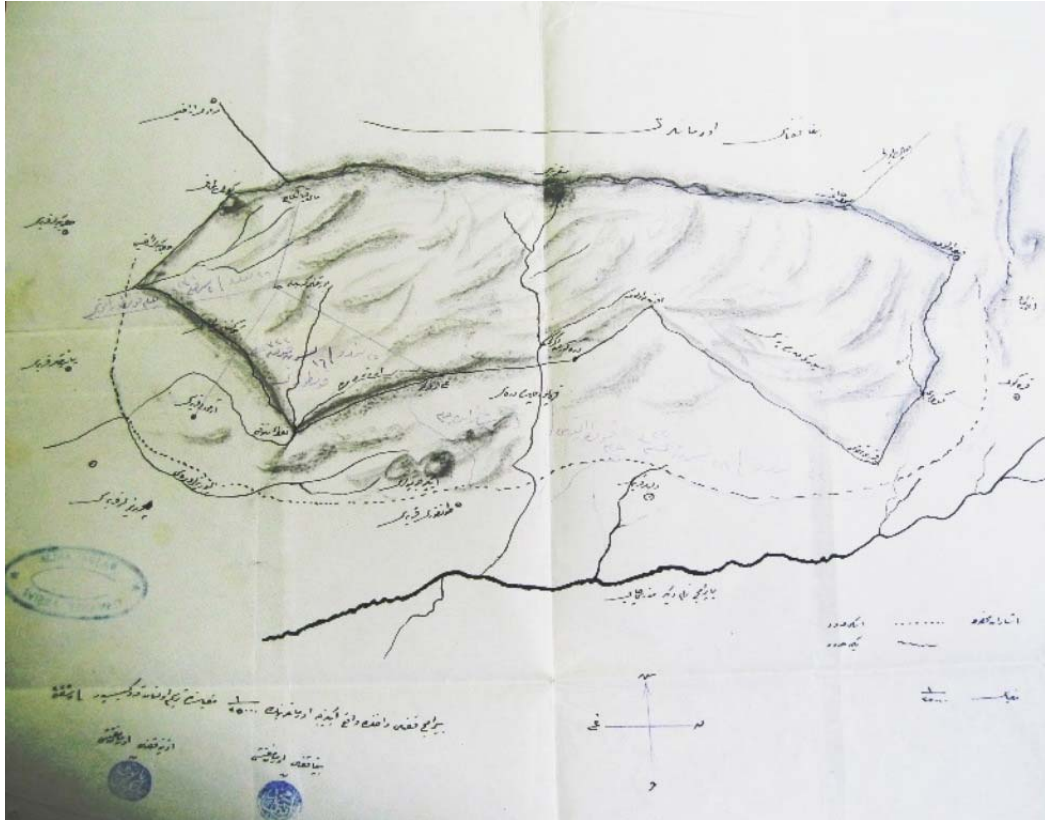


Figure 6: Map of Ikizce forest in Bayramiç (Biga), 1907.

The scale of the map is 1:35,000. It depicts the old and new boundaries of this forest. It is clear that the area of the forest decreased after the survey, which can be seen from the difference between dotted lines (old boundary) and the straight lines (new boundary). The lines having dates on them show the parcels of pine contracts granted in different dates. The map also contains the names of nearest villages, hills and mountains, rivers and streams as well as roads within or around this forest.⁶⁵²

⁶⁵² BOA, T. OMI. 1696/28.

5.4. Role of Technology: Roads and Railways

The Industrial Revolution improved transportation and communication to an unprecedented rate compared to previous centuries. The development of transportation made the movement of timber cheaper and cheaper. The steam navigation and railways penetrating the most remote parts of the world, facilitated the exploitation of natural resources in a more efficient and less costly manner.

As was stated, one of the major obstacles to the development of forest resources had been the lack of an adequate system of transportation. Although the Empire was still in deficient in paved roads until 1880, the government managed to build more than 10,000 kilometers between 1881 and 1897. (see the Table 18). Since the establishment of the Council and later the Ministry of Public Works, the empire also tried to develop railways and to improve river transportation. For example, railways increased from 700 kilometers in 1880 to about 4600 in 1920 (reaching 4085 in 1908). However, the Ottoman had very few railroads at the end of the nineteenth century and their construction was slow when compared to Europe and elsewhere. (see Table 17).

Table 17: Length of railway lines open in the Ottoman Empire and major European countries, 1840-1920 (1,000 km).

Countries	1840	1860	1880	1900	1920
United Kingdom	2.4	14.6	25.0	30.1	32.7
Germany	0.5	11.1	33.8	51.7	57.5
France	0.4	9.2	23.1	38.1	38.2
Italy	0.2	2.4	9.2	16.4	20.4
Russia/USSR	-	1.6	22.8	53.2	71.6
Ottoman Empire	-	0.02	0.7	2.7	4.6
<i>Rest of Europe</i>	0.5	10.9	42.2	70.6	111.2
<i>Europe Total</i>	4.0	49.8	156.8	262.8	336.2
<i>World Total</i>	11.0	105.0	356.6	775.7	1114.9

Source: after Williams, *Deforesting the Earth*, p. 257 and Yerasimos, *Az Gelişmişlik Sürecinde Türkiye*, vol. 2, p. 348.

Commercial movement of forest products with railways was quite low in the Ottoman Empire. For example, the *Chemin de fer Ottoman d'Anatolie* carried only 45, 287 kilograms of firewood; 439,429 kilograms of construction timber; and 55,058 kilograms of charcoal in 1893.⁶⁵³

For the transportation of timber and non-timber products, the cheapest communication facility remained to be the sea navigation in the nineteenth century. Moreover, reliance on steamships had double impact on the commercialization of forests. First it decreased the freight charges to a great extent; and second, it liberated the Forest Administration from the demands of the Imperial Shipyard in the 1880s. The Ottoman navy had already been impoverished owing to a variety of causes, mainly the Sinop incident in 1853, when the Russians destroyed the fleet. This event greatly affected the Ottoman trust in sails and secured their faith in the effectiveness and strength of ironclads. Beginning with Sultan Abdulaziz, the government initiated a program to build a fleet of ironclads constructed in English and French shipyards. However, during the reign of Abdülhamid II, the navy became ineffective due to his fear of dethronement, though a few torpedo boats and destroyers were bought from abroad. The number of steamships belonging to the Ottoman Empire gradually increased and reached 87 (46,498 tons) in 1897-1898 and then to 177 (55,938 tons) in 1899-1900. The number of sailing vessels in the same years were 1349 (252,947 tons) and 2205 (141,055 tons) respectively.⁶⁵⁴

By establishing an infrastructure for industrial development such as the construction of roads, railways, and canals and by the cleaning up of rivers even in the most distant provinces, the government aimed to render the means of communication that could increase the productive powers not only of the agriculture and manufacture, but also the natural resources, i.e. forests, mines, and

⁶⁵³ Cuinet, *La turquie d'asie*, vol. 4, p. 119.

⁶⁵⁴ *Encyclopaedia Britannica. Dictionary of Arts, Sciences, Literature and General Information*, 11th ed., 29 vols. (London and New York: Encyclopaedia Britannica, 1911), vol. 27, p. 430.

minerals, which were until then remained quite useless and valueless due to the high transportation costs. The trade in these sources that was limited to local regions could now find an opportunity to spread to the most remote parts of the Empire in a way cheaper than before. All these efforts represented a shift in the economic mind of the state, as it no longer considered agriculture as the only source of wealth. Both forestry and mining income assumed to have a place in the statistical tables of the Empire.

Table 18: Length of constructed and repaired roads in the Ottoman Empire, 1881-1896.

Year	Constructed		Repaired	
	km	m	km	m
1856-1880	1,367			
1881	135	-	-	-
1882	600	-	-	-
1883	1,497	-	-	-
1884	2,006	-	-	-
1885	2,154	-	-	-
1886	1,491	-	-	-
1887	1,082	-	-	-
1888	863	-	-	-
1889	1,464	-	-	-
1890	172	500	332	200
1891	241	450	553	600
1892	275	250	467	200
1893	321	470	559	100
1894	278	390	434	400
1895	295	100	139	600
1896	326	980	462	700
Total	13,203	140	2,948	800

Source: Güran, *1897 İstatistik Yılığ*, pp. 285-86.

As can be seen in the Table, more than 85 percent of these roads were built in the 1880s. The pace of road construction slowed down in the 1890s. Had the roads been developed, they would still not have been enough for the efficient exploitation of forests because of the bad conditions of forest roads. The table below gave an impression of these roads at the end of the nineteenth century:

Table 19: Conditions of forest roads and their distances to the nearest ports and docks, 1891.

Provinces	Distances to Ports or Docks		Condition of Roads
	Hour	Minute	
Adana	3	20	Partly straight and partly crooked
Aegean Islands	3	8	Steep
Aleppo	3	30	Partly straight and partly steep
Ankara	Remote to coast		Largely crooked
Aydın	2	8	Partly straight and partly crooked
Biga w. Karesi	2	15	Partly straight and partly crooked
Bursa	3	40	Partly straight and partly crooked
Çatalca	1	8	Partly straight and partly steep
Edirne	3	20	Partly straight and partly steep
Erzurum	Remote to coast		Largely crooked
Işkodra	3	10	Crooked
Izmid	1	8	Largely straight
Kastamonu	2	20	Partly straight and partly crooked
Konya	3	20	Partly straight and partly crooked
Kosova	3	18	Highly steep mule road
Manastir	30	-	Steep mule road
Sivas	Remote to coast		Largely crooked
Syria	3	12	Steep mule road
Thessaloniki	3	25	Highly steep mule road
Trabzon	3	15	Largely crooked

Source: BOA, *Y. PRK. OMZ.* 1/33.

It seems that the best roads existed in the forests of Izmid subprovince. On the straight roads carriages could move. But the forests having steep roads were difficult to exploit. On the other hand, the forests in Manastir, Syria, and Thessaloniki had only mule roads, on which it was highly difficult to carry large blocks of trees.

The transportation and labor costs were higher, especially in the marginal montane forests, where there were no facilities like carriage roads and river floating. Land transportation costed much more than water transport. The construction of railways could lower the transport costs, but it was not spreaded empire-wide. Also forest railways was not developed in the Ottoman Empire, though French experts proposed their construction in some marginal forests, such as

in Albania. The lack of suitable roads and rivers from the montane forests to the coastal ports and railway stations made timber transportation expensive and very difficult. Like transportation, the processing of wood was labor-intensive. Though there were water-powered sawmills around large forests, steam-powered saws were nearly absent. Moreover, the majority of peasants used handsaws and axes for cutting and splitting. Thus, had the roads been built, the Ottoman forestry still could not have had a comparative advantage against the more technologically oriented forestry of the European and Scandinavian countries.

5.5. Forest Concessions in the 1860s

The Forest Regulation sealed that commercial exploitation of Ottoman forests was mediated through concessions, licenses, and permits directly handed out by the government. The Forest Administration was responsible for managing the necessary procedures. This basically meant that the local authorities had no significant rights whatsoever in these matters anymore. This was also the last stage in the centralization of forest administration.

Before the establishment of the Forest Administration, the agents of the Imperial Shipyard had been utilizing freely the forests reserved for its utilization. These forests were especially located at the coastal places. The Shipyard had an absolute right to obtain suitable trees for shipbuilding. These trees were mostly very bulky and in regular shape. However, the timber officials, merchants, and peasants, who were responsible for cutting and transporting timber to the nearest ports, abused this system. The Shipyard had its own tabulations for the dimension of beams and barks used in the shipyards. If the suppliers did not observe these dimensions, the superintendents rejected them. The abuses mostly occurred due to the cutting of unsuitable timber. In many cases, the superintendents of the Shipyard

did actively involve in such kind of abuses. The Forest Regulation tried to resolve the problems caused by these inconveniences by entrusting the Forest Administration with the supply of raw materials to the Shipyard.⁶⁵⁵ However, though the Regulation served the purpose of the administration, the forest officials were not enough to supervise all these deliveries on time. This caused many conflicts between the Forest Administration and the Shipyard.

Though the government was trying to make void the contracts granted before the *Cahier des Charges* (July 1861),⁶⁵⁶ the Seraskerate in Istanbul continued to bestow concessions to timber contractors for the supply of Imperial Army, especially in the Balkans. With the advice of the Council of Public works, the government issued a decree, which asserted that the forest officials instead of contractors would provide the needs of the military institutions. The contractors was to receive forest products from the forest officials and then to deliver them to the army or navy. They were not allowed anymore to fell trees from forests on their own. The origin of this decision was the contract arranged with Hacı Ali Paşa, one of the *mirü'l-ümeras*, to provide the firewood supplies of the army in Belgrade from the forests in Belene. Hacı Ali complained to Izzet Paşa, the commander-in-chief of the army in Belgrade that the local forest official, Bedri, was obstructing him, thus delaying the provisions. The Seraskerate asked the reasons of impediment on 16 October 1861, warned Bedri that the need was very urgent, and invited him to enable the work of Hacı Ali Paşa. On 24 October, Bedri wrote a letter to the Serasker clarifying the reasons of the complaints by Hacı Ali Paşa. Bedri stated that upon the order of the Grand Vizierate on the designation of the landmarks of the boundaries, it was also ordered that the officials were to be careful about protecting the forests in Bosnia and Herzegovina by not allowing anyone to cut any trees from these forests. When Bedri set out to do the demarcations, he was informed in

⁶⁵⁵ See above: 4.4. “Supply of the Imperial Shipyard and Artillery”.

⁶⁵⁶ See above: 3.4.3. “Cahier des Charges of Forests” above.

Belene that Hacı Ali received a contract from the Seraskerate. The forests in Belene were on the banks of Sava, and were to be protected in accordance with the order of the Grand Vizier. Bedri further said that those who destroyed these forests were those who received felling licenses from the government according to the old procedures.⁶⁵⁷

Ali Paşa was among these contractors who was well-known in the province for his partnership with an Austrian merchant. He was also famous for making excessive and unofficial cuttings from the forests in Zebece (Banialuka) with his Austrian partner. Meanwhile, the government was also trying to cancel this latter contract.⁶⁵⁸

Bedri claimed that under these conditions, it would be wrong to let them cut oak forests in Belene. Bedri cautioned the director of Belene to make ready the amount of timber for the need of the army. The local government then prepared the firewood from the felled trees, leaving the green wood untouched and delivered them to Hacı Ali Paşa at the port on Sava. Hacı Ali, realizing that it was nearly impossible for him to cut the extra timber written in his contract, complained to Izzed Paşa as if the local officials were preventing him to fulfill his contract entirely. The Serasker's involvement in this affair revealed the clash of military and administrative interests among the governmental institutions. Bedri defended the administrative position by asserting that if Hacı Ali was allowed to cut trees from the banks of Sava, they would ruin very soon and thus the army and local people would purchase their needs from other regions. The governor-general of Bosnia, Osman Paşa, had already prohibited cutting trees from forests, which the state could make profit. He also designated certain tracts for the use of peasants and townspeople as coppices. Finally, Bedri explained that the Bosnian government

⁶⁵⁷ BOA, *A. MKT. UM 514/93* (19 R 1278/24 October 1861).

⁶⁵⁸ *Ibid.*

would supply the provisions of the Army, which was much better than granting contracts to individuals.⁶⁵⁹

Ömer Paşa, while he was the president of the Danubian Commission, his secretary Mehmed Efendi, Edirneli Said Ağa, Tevfik Efendi and finally Mr. [Klam], an Austrian subject working for the same commission established an informal company engaged in logging in the forests around Tulcha. The governor of Silistre informed the Sublime Porte that the company hired large boats for carrying the firewood via Danube to Austria. Though they knew well that the government strictly prohibited cutting woods near the border and also banned exporting firewood and charcoal abroad, they might have relied on to the power of their positions in the Commission to suppose that the government would let them export the firewood. The company asked the Sublime Porte, whether it would at least permit them to burn lime within the forests as it had already rejected their request for a permission to export. The Danubian Commission had been felling trees from the montane forest around the Danube since its establishment. The level of waste was even worse than loggings. Many unsuitable trees were left on ground after cuttings. Also the officials of the commission cut trees from the forests for their private interests and exported timber on their own. Working for the commission became a privilege for some, eventually causing destruction of forests. The government complained that the forested lands turned to empty fields in a very short time. Salih Bey, a military officer in the region, explained that since there were not enough guards or gendarmerie, the local government could not effectively protect these forests. The government's main concern was in effect to protect these forests from the encroachment of the commission and private individuals. First because the Danube was the borderline of the Empire; and second, because the Imperial Shipyard was utilizing these forests; and third, if the army were to march against the Danubian frontier, its firewood needs and the timber it demanded for

⁶⁵⁹ Ibid.

building fortifications were provided from these forests, and finally, because these forests constituted natural barriers of defense. The government always considered these forests on the frontiers crucial for security reasons. Forests around the Danube were preferred because of small costs of felling and transportation. By this time, the government did not have at its disposal either the necessary personnel to protect these forests or an organic statute to enforce its claims on forested lands.⁶⁶⁰

The *Cahier des Charges*, made an early impact on some ‘hungry’ suppliants. About one month earlier, while these documents were taking their final shape in the Council of Tanzimat, some of the *Hayriyye* merchants applied to the Ministry of Trade for establishing a joint-stock company, named *Şirket-i Sıddikiyye*, and requested certain concessions. The main objective of the company was to involve in the trade for industrial and agricultural products between the Ottoman Empire and Europe. The other objectives were to construct roads and buildings for commercial purposes, to establish factories, to work mines, to purchase and sale forests, to operate ships, and to conduct other public improvement projects. The Ministry of Trade, though acknowledging the importance of such private enterprises for developing commerce in the Empire, stated that the conditions in the memorandum of the merchants were against the prevailing trade procedures, customs rules and regulations, and the commercial treaties made with European countries. On these grounds, the proposal was rejected and returned for revision.⁶⁶¹

On the other hand, an example of a company established specifically for the exploitation of forests, is learned from the news report of the *Times* dated 9 November 1865. The Izmit (Ottoman) Forest Company was founded with a capital of 160,000*l.* and in shares of 10*l.* The object of the company was to purchase the interest in a concession for exploiting the whole of the forests of Izmid for an indefinite period and to undertake the existing facilities, such as the steam sawing

⁶⁶⁰ BOA, *A. MKT. UM.* 532/77 (14 B 1278/15 January 1862).

⁶⁶¹ BOA, *A. MKT. MVL.* 128/61 (30 Za 1277/9 June 1861).

mills.⁶⁶² Foreign merchants also applied to the central government in order to receive felling licenses. Considering the government's concern for competition in timber sales, these individual applications were less preferred.

An important auction sale for one thousand oak trees suitable for barrel staves from the Bosnian forests was held on October 1867. The revenue from this auction was planned to be used for establishing a new Forest Administration. The auction was held at Sarajevo under the supervision of the French expert, Simon. He marked these trees in person; calculated the volume of trees; and assessed a certain amount of money for them. All of these were said to be done through scientific principles.⁶⁶³ However, only one contractor entered into the auction, which paid only 225 *guruş* per thousand of barrel staves.⁶⁶⁴ Apart from this, the government announced two other auctions in the same year. The first was the 500,000 cubic meters black pine (*Pinus nigra subsp. pallasiana*) timber from the Ida mountains in Çanakkale province. The second was the 100,000 cubic meters cedar (*Cedrus libani*) timber from the Kurucaova forest of Karaman province. However, nobody attended these two auctions.⁶⁶⁵ It is clear that profit-maximizing contractors did not welcome the competition in timber sales. To borrow from Scott's famous aphorism, this attitude might be called 'the everyday forms of contractor resistance.'⁶⁶⁶ The contractors preferred to arrange informal associations to "collude to avoid the inroads into their profits that competition brings."⁶⁶⁷ Such collusion could take

⁶⁶² "Money-Market & Intelligence," *The Times*, 9 November 1865, Issue 25338.

⁶⁶³ Bricogne, *Ormançılık Heyeti*, p. 10.

⁶⁶⁴ *Ibid.*, p. 15.

⁶⁶⁵ *Ibid.*, p. 11.

⁶⁶⁶ Scott, *Everday Forms of Peasant Resistance*, passim.

⁶⁶⁷ Ken Binmore, *Fun and Games: A Text on Game Theory* (Lenxington, Mass. and Toronto: D. C. Heath and Company, 1992), p. 314.

many forms. In a simple manner, it might be an arrangement which allotted each contractor a negotiated market share, where absence in auctions could be a method of price control. In a complicated manner, the contractors might have developed an unspoken agreement that neither did squeeze the other too hard to improve their outcomes.⁶⁶⁸ It seems that this collusion problem remained to be a source of obstruction for the Forest Administration on its way to commercialize forest resources until the twentieth century. Another example from the years 1865-66 serves better to understand the Ottoman attitude toward and experience with the forest concessions. The case was important in itself, since we learn that the *Cahier des Charges* was not put into operation.

In 1864, a timber merchant from Istanbul, Kerestecioğlu Hoca Haçador, applied to the Sublime Porte to grant a concession of two years for cutting trees to produce two millions of barrel staves to be exported Europe from the forests on the banks of Una and Sava in the subprovinces of Banailuka and Bihke. He promised to pay the total value in equal installments to the account of public treasury. Upon this petition, one of the first graduates of the forest school, Artin Efendi, was sent to Bosnia as inspector-general to formally investigate the present conditions of forests. His mission was to define the necessary measures to make them more profitable

⁶⁶⁸ Ibid. On collusion in auctions, see especially: John A. List, Daniel L. Millimet, and Michael K. Price, "Inferring Treatment Status When Treatment Assignment Is Unknown: Detecting Collusion in Timber Auctions," (February 2007, <http://faculty.smu.edu/millimet/pdf/timber.pdf>, date accessed Jan 2, 2007); K. Hendricks and R. Porter, "Collusion in Auctions," *Annals d'Economie et de Statistique* 15-16 (1989); Susan Athey, Jonathan Levin, and Enrique Seira, "Comparing Open and Sealed Bid Auctions: Theory and Evidence from Timber Auctions," in *Paper Presented at the EuroConference on "Auctions and Market Design: Theory, Evidence and Applications"*, organised by Fondazione Eni Enrico Mattei and Consip and sponsored by the EU. (Rome: The Fondazione Eni Enrico Mattei Note di Lavoro Series Index: <http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm>, December 2004, date accessed January 2, 2007); Luke Froeb and Preston McAfee, "Deterring Bid Rigging in Forest Service Timber Auctions," in *Economic Analysis Group Discussion Paper* (May 5, 1988, <http://vita.mcafee.cc/PDF/DeterringBidRigging.pdf>, date accessed January 2, 2007). I thank Okan Yıllankaya for letting me aware of these articles.

and to maximize the revenues received from them.⁶⁶⁹ Artin presented a report to the governor-general of Bosnia on 10 January 1865. His initial investigations revealed that former price of barrel staves was 35 *guruş* per thousand. Although the price could be raised to 140 *guruş*, he informed that it was not possible at the moment because of the irregular conditions of forests and the lack of maps. Thus, he proposed to tender the barrel staves at 120 *guruş* per thousand. He also said that since the two years period was quite long, one year would be enough for the contractor to finish the fellings. However, he added that because the contractor wished to employ mostly foreign workers, it would be difficult for him to provide the necessary labor within a year. Therefore, he could apply 61 days before the end of his contract to prolong it one more year. But, for this prolongation he was to pay 3,000 *guruş* for office fees (*kalemiyye harcı*) and a repayable 10,000 *guruş* as caution money.⁶⁷⁰

In his second report, Artin Efendi proposed to the government the adaptation of following measures that he believed were necessary to facilitate the exploitation of large forests, which were yet unproductive for the treasury:

1. To give to the governor-general of Bosnia the power to authorize cutting of wood amounting up to 6 millions barrel staves, without being obliged to refer first to the Sublime Porte. But he was to send a copy of the contracts made with the purchaser to the Ministry of Public Works for validation. The Ministry was to give its decisions about the contracts within six months. If it did not, they would be considered as approved.
2. To use one-third of Bosnian annual forest revenue in the improvement of the roads or streams of water on which timber transport was executed and for the expenses necessary to draw maps.

⁶⁶⁹ BOA, *A .MKT. MHM. 302/81* (2 M 1281/7 June 1864).

⁶⁷⁰ *Ibid.*

3. To reposit all revenues and taxes from the cutting of wood and timber to the financial office (*mal sandığı*) at Sarajevo instead of the central treasury.
4. To exempt the customs duties of wood and timber sold by the state.

Then, the governor-general of Bosnia sent the reports of Artin Efendi to the Council of Public Works. Upon receiving the report, the Council prepared a memorandum on the measures to be taken to facilitate the administration and management of forests in Bosnia on 13 April 1865.⁶⁷¹

Referring to Article 26 of the Forest Bill of 1861, the Council stated that since the barrel staves, which were the principal products of Bosnian forests, had been sold until now at 35 *guruş* per thousand and if this price could not be increased fourfold, six millions of barrel staves thus represented a revenue of at least 200,000 *guruş* to be received by the treasury. As six million barrel staves did not usually constitute an object of a single concession, but their cut would be granted to different contractors, the Council concluded that the cuttings with which Artin Efendi dealt were usually less than 100,000 *guruş*, which meant the Ministry of Public Works could authorize them.⁶⁷²

Yet the authorization by the Ministry did not involve the same delays as the approval by the Sublime Porte, because the minister could immediately submit the projects of timber sales to the examination of the Council of Public Works and transmit their approval to the Bosnian governor by means of telegraph. Therefore, the Council explained, there was no need of absolute necessity to delegate the powers demanded by Artin Efendi to the Bosnian governor.

The Council added that the Ministry was to have the knowledge of the important timber sales as well as the propositions that forest inspectors would make to the governor. This was the only means to give a certain weight to the opinions of

⁶⁷¹ BOA, *I. DH.* 38057 (1 Za 1282/18 March 1866).

⁶⁷² BOA, *A .MKT. MHM.* 302/81. Unless otherwise stated, the following narrative is based on this document.

forest inspectors and to prevent all acts of arbitrary sales and thus the abuses. Therefore, for example, if the inspector evaluated the thousand of barrel staves at 50 *guruş*, the governor could not propose to sale them at 20 *guruş*, without giving a serious explanation to the Ministry for such a difference. This measure displays the government's fear about the recurrence of the same problems caused by the former concessions, given by Ali Paşa to Austrian merchants, which could not be resolved successfully.

Meanwhile, the Council recognized the necessity of reassuring timber contractors against the delays in the determination of the marketplaces that they could put their merchandize for sale. The Council then authorized the governor of Bosnia to specify the possible markets within his limits of jurisdiction, but these markets would be provisional and definitive only after the approval of the Minister of Public Works.

For the portion of revenues to be allocated to the amelioration of the roads, the Council stated that the government had two-way interest in the exploitation of the forests. First, the cuttings are very advantageous for the forests themselves, since getting rid of trees that achieved the end of their development would permit the younger trees to develop and maintain rigorously. Second, the state had the advantage to exploit its forests due to the charges received by the treasury from the sales of wood. This charge was to be paid by the buyer on the net product of the timber sale. The higher the net product, the higher this charge would be.

The reduction in the costs of transportation that were the major part in the augmentation of the net product became an important issue. Thus, the government did have an interest in facilitating the transport of woods. The Council observed also the fact that the charges to be paid to the treasury were dependent on the efficient exploitation of forests. All the costs that could be reduced were also sources of profit for the local people who enjoyed the forests. Therefore, the roads of transportation were to be improved as Artin Efendi proposed. As the means to be

employed, the Council proposed to construct ordinary roads in Bosnia and to organize a service of engineers, as in the other provinces. For the roads within forests, the Council said that since it was not possible to establish paved roads at the moment, the question was to improve the most difficult passages, to construct some bridges and to make other urgent works. For these purposes, the engineers were to be given more liberty. The Council proposed authorizing the governor for supervising all these works.

The Council thought that the centralization of the payment of forest taxes to the provincial financial office were an essential measure to prevent the disorders and abuses while the forest staff was not sufficient and the delimitation of forests district by district had not yet been took place. With the payments to the different financial offices, the control would become more difficult and the services be complicated. The Council proposed, thus, to approve completely the third proposition of Artin Efendi.

As for the exemption of custom duties, the Council stated that this exemption could only be applied to the timber exported from Bosnia under the reservation that a charge receipt was owed to the government according to Article 24 of the Forest Bill.

In sum, the Council of Public Works give the following propositions: First, the governor of Bosnia would be authorized to sell the forest cuttings in the state forests until a competitive bidding of an amount of 100,000 *guruş* for each partial sale. But, the contracts of these sales were to be addressed by him to the Ministry of Public Works with the proposition and notice of the forest engineer. These contracts were going to be considered as definitive, unless in a limit of six weeks, the minister notified the governor of Bosnia. Second, the governor would be entitled to receive one third of the sale contract during this year, until a competitive bidding of 60,000 *guruş*. He was to employ the amount, under the supervision of the forest engineer, to improve the roads for timber transportation and for the

expenses of the preparation of the plans and other operations by the forest service. Moreover, he was to justify these expenses at the end of the campaign. Third, the Council decided that a group of engineers were to be appointed to Bosnia for the application of the regulation of roads and waterways. Fourth, all of the charges received from the contractors were to be reposed to the financial office at Sarajevo. And finally, the contracted timber would be exempted from all custom duties after the justification of the receipt of their charges.

This memorandum as well as Artin's reports, then, communicated with the Ministry of Finances and the Customs Administration (*Rüsumat Emaneti*) before they were sent to the High Council of the Treasuries (*Meclis-i Ali-i Hazain*). From there, a *mazbata* (minutes/account) was finally presented to the Grand Vizierate.

On 18 March 1866, the Grand Vizierate approved the first three proposals and entitled the Ministry of Public Works to apply these measures in Bosnian forests. However, for the fourth measure, it put a couple of reservations. Since the *Cahier des Charges* was not yet put into execution, the customs duty was to be received from the state and private forest without any exception. Though the 3rd article of the Cahier stated that the customs fee should not be taken from timber sold by a fixed price, this article could not be applied unless the regulations on customs fees and dues were rearranged.

The aim of including this exemption was to encourage people to purchase timber from the state forests. The government believed that it was in confirmation with the objective of making the working of forests easier and appealing. However, the Grand Vizierate acclaimed that if the state forests were exempted and private forests were not, various conflicts would emerge, since the rate of customs fee was comparably low with respect to the price of timber. The Grand Vizierate added that the benefits expected from encouraging the would-be purchasers could not compensate the damages that could occur from violating the regulations on

customs. Finally, it was concluded that the prevailing regulations should not be violated, while granting concessions.

The export of stave wood and shook remained to be an important source of revenue for the Ottoman government throughout 1874. The shook was the most abundant and valuable commercial material of the forests in Bosnia. The major export destination was Marseilles. The stave wood was transported by floating on the affluents of Sava to the railroad of Sissek in Trieste, where the loading took place.⁶⁷³ Bricogne says that though the Bosnian oak was not very suitable for shipbuilding, it was excellent for splitting, which provided the staves with much estimated quality and dimension for cooperage.⁶⁷⁴ However, Bricogne adds that local techniques of cooperage wasted large parts of oak trees. He claims that the organization of the forest administration and especially the inauguration of a system of auction sales, which stimulated competition, modified this wasteful production. The auctions managed to find a real benefit from all wood, like the retail of shook and small (barrel) staves. To give an idea of the importance of this industry for the Ottoman treasury, Bricogne provides valuable information for the period between end of 1868 and 1874. During this time more than 30 million small (barrel) staves were manufactured,⁶⁷⁵ which, sold on average 500 *guruş* per thousand, brought to the central treasury a total amount of 15 million *guruş* in six years.⁶⁷⁶ Bricogne estimated that the forest income of Bosnian forests could be increased to four million *guruş* annually, if the exploitation for the small (barrel) staves applied only

⁶⁷³ Bricogne, *Ormançılık Heyeti*, p. 42

⁶⁷⁴ Ibid.

⁶⁷⁵ This calculation was made according to the small (barrel) staves, whose dimensions are as follows: length, 0,974m.; width, 0,122m to 0,162m; thickness, 0,025m to 0,035m. Ibid., p. 45.

⁶⁷⁶ The average auction prices for each year were as follows (per thousand): In 1869, 766 *guruş*; in 1870, 840 *guruş*; in 1871, 450 *guruş* (the price fell due to the Franco-Prussian War of 1870-71); in 1872, 750 *guruş*; in 1873, the auctions were postponed due to the cholera quarantines. Ibid., p. 15.

to trees of at least 1.8 meters to 2 meters of circumference. Mostly decaying and mature, and which reached their maximum rate of growth, they would bring no harm to the forests until the exhaustion of this old material by selective loggings.⁶⁷⁷

Nonetheless, when the Austrian influence increased in Bosnia and Herzegovina after 1875, the trade of barrel staves from the market of Banialuka came to a standstill. This trade was in the hands of Austro-Hungarian timber dealers. They usually employed foreign workers brought by them to Bosnia. But, the Bosnian peasants engaged with logging and transporting timber from the forests with their pack animals and by floating on Sava.⁶⁷⁸

Following the failure of the wood auctions in Bosnia in the 1860s, the government tried to create a competitive environment by bringing in traders from other regions.⁶⁷⁹ There were also regions completely excluded, where both the cahier des charges and the Forest Regulation was never put into effect, like, for example, Albania and Montenegro. According to Bricogne, this region, literally called “rebellious districts” (*nevahi-i asiyye*) by the Ottomans, was already politically contentious, so implementing the forestry regulations, which would only further increase tensions, would be contrary to good administration.⁶⁸⁰

5.5.1. Railway Concessions

The Ottoman government took action for opening the forest resources of the country for the construction of railways to develop the resources of the Empire. To this aim, the Ottoman Embassy in London was authorized to advertise this decision

⁶⁷⁷ Ibid., p. 46.

⁶⁷⁸ Ibid.

⁶⁷⁹ Ibid., p. 15.

⁶⁸⁰ Ibid., p. 21.

to the capitalists of Great Britain. A statement was sent, which consisted of 15 articles, concerning the conditions on which the concession for constructing and working a railway line between Istanbul and Belgrade would be based. The second article announced that the government decided to apply directly to the experience and capital of Europe. The construction and working of this line would be granted to the company, which could make by tender the most advantageous offer, and could present the best guarantee. For the forests of the Empire, there existed one crucial article in the statement. According to the Article 12, the timber necessary for the construction of railways, stations, and other facilities would be given 'exclusively' from the forests of the state, of which the conditions would be fixed by an agreement between the Ottoman government and the concessionary company. Likewise, the coal mines which were located in the vicinity of the railway line would be granted to the concessionary company under the same condition.⁶⁸¹ The railway line between Istanbul and Belgrade could not be completed entirely, but individual lines were constructed in various parts of the Balkans during the second half of the nineteenth century.⁶⁸²

The timber for the constructions of the Izmir railway was provided from the *cibal-i mubaha* forest on the Selahaddin Mountain. But the *çiftlik* owners around the vicinity demanded money from woodcutters and transporters. A certain Vasilaki, informed the government that if these people continued exacting money from the workers, the construction of the line would be delayed. The matter was discussed in the Meclis-i Ahkam-ı Adliye. The council asked the real condition of the disputed forest, whether it was *cibal-i mubaha* or private property of *çiftlik* owners. The Divan-ı Hümayun responded that the company granted the right to exploit forests and quarries located within 30 miles (70,400 *zira-i Osmani*) in both

⁶⁸¹ See the Article 14 in: "Constantinople and Belgrade," *The Times*, 13 October 1855, Issue 22184.

⁶⁸² For these lines, see the table in: Yerasimos, *Az gelişmişlik Sürecinde Türkiye*, p. 348.

sides of the line on the condition that the company was to cover the expenses of cutting and transport. The company was also exempted from taxation. But if the company wanted to log trees and obtain stones from private forests, it was to get the consent of the owners, which was written in the Article 13 of the contract made with the company. The matter could not be solved in the capital, and the local government was asked to fix the real condition of these montane forests, whether it was *cibal-i mubaha* or it was within the boundaries of the *çiftlik* owners, and also to determine whether the forests situated within the range given as concession.⁶⁸³

The Ottoman government provided the 'exclusive' concessions, as promised above, to the other concessionaires of railways as much as it could, but these concessions did not satisfy everybody alike, which can be seen in the discussion about the *Cahier des Charges*.

The Council of Public Works issued in 1858, an elaborate and detailed *Cahier des Charges*, or specifications (*şartname*), which put forth the conditions for the concession of railways. But, MacDonald Stephenson, the chairman of the Izmir-Aydın Railway, argued that no European capitalist would invest money in Ottoman railways under such conditions. He added that the earlier concessions were given with the 'most liberal principles' while the new *Cahier des Charges*, which set tariff rates for goods and passengers at a rate much lower than the Izmir, Aydın, and Köstence tariffs, would deter potential European capitalists from undertaking further concessions. Moreover, the *Cahier des Charges* left blank the former concessions given to the railway companies, thus Stephenson said:

The *Cahier des Charges*, with all its annoying minutiae and control, does not improve this most essential want, for, while it is so very accurate about all the obligations of the future railway companies, all the most important points, such as the time for which the concession is given, the amount of guarantee, and all the advantages of using quarries, mines, and

⁶⁸³ BOA, *A. MKT. UM 509/69* (1278/1861-62).

Government forests, which have been conferred on most lines hitherto granted, are left in blank, at the option of the Government.⁶⁸⁴

Finally, on 16 November 1858, it was decided that a special committee be established to modify the conditions in the new *Cahier des Charges* to prompt European capitalists to take part in the future concessions (See the above news report for further details.) At the beginning, the European entrepreneurs were reluctant to risk their money in Ottoman railways, but after the substantial guarantees, including both monetary and raw materials, provided by the government, there occurred a competition for receiving concessions. In 1888, the Public Debt Administration (PDA) proposed to allocate the tithes of the districts that the railways would pass to compensate for the railway guarantees. According to the plan, the PDA would deliver railway companies the amounts of their guarantees, before it transmitted the surplus income to the imperial government. The government adopted this proposal, and admitted further that it would warrant the gross receipts per kilometer of concessioned railways. The economic effect of the railways upon the districts through which they run is apparent from the comparative values of the tithes in the regions traversed by the Anatolian railway in 1889 and 1898.⁶⁸⁵

Among the concessioned railway lines, the most troublesome and most interesting, because of its 'long' history, was the line granted to Baron Maurice de Hirsch. This concession also caused difficulties for the Forest Administration after 1870s.

⁶⁸⁴ "Turkey," *The Times*, 17 November 1858, Issue 23153.

⁶⁸⁵ Caillard, "Turkey. Geography and Statistics," p. 440. The index for the revenues of tithe received from the regions traversed by the Anatolian railways between 1889 and 1909 is as follows: 1889=51.6, 1898=76.4, 1908-1909=100. Caillard, "Turkey. Geography and Statistics," p. 439.

5.5.2. Railway Concession Granted to Baron Hirsch

During the last phases of the Crimean War, the Ottoman government planned to construct a railway line between Istanbul and Vienna, chiefly by the recommendation of foreign advisers and railway entrepreneurs. Besides military concerns, caused by the difficulty of logistics and Austrian threat in the Danubian principalities and Bosnia, this line would also develop the trade relations with Europe. After the failure of initial efforts to realize this objective, finally the government made a contract with Baron de Hirsch (1831-1896), a Bavarian Jewish financier,⁶⁸⁶ signed by the Minister of Public Works, Davud Paşa, on 29 April 1869, including a concession for the working of the railway line for a period of 99 years.⁶⁸⁷

The concession included a main line from Istanbul to the Austrian border through Edirne, Sofia, Niş, Sarajevo and Banialuka. Besides this main line, there were also four minor lines: Edirne to Dedeğaç (Alexandropolis), Plovdiv to Burgaz (on the Black Sea), Niş to Serbian frontier, and Priştina to Thessaloniki. The total length of the conceded lines was estimated to be about 2,500 kilometers. Baron de Hirsch founded two companies to manage the funds for the construction of these lines. The first was the contracting party; the second, on the other hand, was the operating company. According to the contract, Baron de Hirsch would receive a rent of 14,000 francs per km from the Government and 8,000 francs per km from the operating company, the *Compagnie Generale d'Exploitation des Chemine de fer de la Turquie d'Europe*, except for the first ten years. Baron de

⁶⁸⁶ He was called as 'Turkish Hirsch' because a large part of his wealth was derived from the railway concessions received from the Ottoman Empire. Kurt Grunwald, *Türkenhirsch: A Study of Baron Maurice de Hirsch, Entrepreneur and Philanthropist* (Jerusalem: Israel Program for Scientific Translations, 1966).

⁶⁸⁷ HK, *Doc. No. 226* (17 Nisan 1285/29 April 1869). The document is originally published in: *Mecmua-i Mukavelat*, vol. 3, pp. 1558-1561. Also see: Yerasimos, *Az gelişmişlik Sürecinde Türkiye*, p. 197.

Hirsch received a guarantee fund, 65,000,000 francs in advance, to secure the payment of this 8,000 francs during the first ten years.⁶⁸⁸

It is interesting to note that there is almost no mention of the special subconcession on forests, mines, and quarries, given to Baron de Hirsch as an appendage to this main concession, in the sources dealing with railway concessions. According to this subconcession, the company, after presenting the directions of the railway lines in the Balkans, would obtain the working rights of the forests, mines, and quarries belonging to the state, located 10 kilometers on the left and right side of each line. Nonetheless, the company was to comply with the existing and future rules and regulations during the exploitations. For the exploitations of forests, the company was to act in concert with the Forest Administration. Besides, the Imperial Shipyard had the right to cut and remove necessary timber after paying the costs to the company. The company were to pay the 30 percent of the net product (*hasılât-ı safiye*) in cash to the Ottoman government. On the other hand, had the concession extended to 20 kilometers, the government would receive the 50 percent.⁶⁸⁹

In short, the concession made with Hirsch, both materially and physically, put a heavy burden on the budget. Besides, after the introduction of the Forest Regulation, it became a drawback for an effective administration and management of forests. Though there were a few kilometers constructed, the fictitious possession of forests in an area about 50,000 square kilometers caused a big problem for the administrative domain of the Forest Administration.

Although the articles of the first concession was slightly modified on 16 November 1870, the negotiations for renewing the whole contract made with Hirsch culminated in September 1871 under the authority of the new Grand Vizier Mahmud Nedim Paşa. Eventually, the anticipated contract was concluded between

⁶⁸⁸ For a more detailed analysis of this concession, see: Yerasimos, *Az gelişmişlik Sürecinde Türkiye*, pp. 197-201.

⁶⁸⁹ HK, *Doc. No. 226*.

the Sublime Porte, represented by Mahmud Paşa and Baron Maurice de Hirsch on 10 May 1872 in Istanbul. With this contract, the concessions granted on 29 April 1869 were cancelled and Hirsch abandoned the working rights of the forests, mines, and quarries to the Ottoman government.

In lieu of the cancellation, Baron de Hirsch received the exclusive rights of exploiting a section of state forests, being equivalent on the whole to the surface of a square having thirty kilometers of edge (90,000 hectares), and located in the surroundings of Belova, or on the course of the Maritza from Sarambey to Plovdiv, for thirty-five years. Hirsch was to present within one year a plan indicating the forests he wished to take the right of exploitation. Although the forests chosen by him could form several separate sections, they could not exceed the total surface of a square having thirty kilometers of edges. Nonetheless, these sections were to be located within the limits indicated above.

The government, by granting the right of exploitation of these forests, expected Baron de Hirsch to be a ‘good father of the family’ and at the same time to conform strictly to the forest rules and regulations of the Empire, but also assured him that the Forest Administration would not interfere with the use of this right. Moreover, he was exempted from all unspecified taxes, fees or royalties, except for an annual rental of 50,000 francs, payable directly to the government. In return, Baron de Hirsch accepted to leave all the facilities and buildings, established by him, to the Ottoman government without any unspecified indemnity after the end of the thirty-five years period.⁶⁹⁰

Finally, Baron de Hirsch chose the Belova (today in southern Bulgaria) forests. This forest was located on the right bank of the upper Maritza and the northern ridges of the Rhodopes, around the district of Plovdiv in the province of Edirne.⁶⁹¹ The manageable forests around the region offered to Hirsch were divided

⁶⁹⁰ BOA, *Y. EE. 29/141* (10 Ra 1289/18 May 1872, in French.).

⁶⁹¹ Bricogne, “Les fôrets de l’empire Ottoman,” p. 284.

into two sections: first the Belova forests, which consisted of about 35,000 to 40,000 hectares, and second the Batak forests, on the basin of Kritchma, consisting of approximately 50,000 to 60,000 hectares. Bricogne acknowledges that the forests of Belova are the most beautiful ones according to all reports, whereas the latter suffered mainly from the devastations. The main species in these forests were the oak, the beech, the scots pine, the laricio pine (Corsican pine, or *Pinus nigra subsp. laricio*) and the spruce, though not very abundant. There were also few hornbeams, ashes, maples and birchs, scattered among the other species. Bricogne says that the oak trees, near to the Maritza, which is 6 to 25 kilometers from the forests, were very suitable for commercial exploitation, if the administration could prevent them to convert into coppice.⁶⁹² Although the spruce was one of the largest and tallest among all species, the girths ranging between 3.5 and 4.5 meters and the heights between 35 and 40 meters, its exploitation was difficult due to the high altitudes of vegetation. There were other large species suitable for exploitation, such as the scots pine (*Pinus sylvestris*) and the laricio pine, but the local inhabitants mostly exposed them to mutilation for producing resin and touchwood (*çıra*).⁶⁹³

Meanwhile, the government sought for the consent of the peasants by allotting *baltaliks* to satisfy their demands.⁶⁹⁴ Bricogne claimed that the concession had been excellent, if the rational conditions of exploitation and control and the payment of a proportional royalty had been imposed on the company by the government. According to him, considering the productivity of this forest, the rental, 50,000 francs per annum, could be increased fourfold.⁶⁹⁵

Hirsch's railway company, *Chemins de fers Orientaux*, was also one of the major consumers of the forests in Macedonia, Thessaly, and Thessaloniki. For

⁶⁹² Ibid., p. 285.

⁶⁹³ Ibid.

⁶⁹⁴ Bricogne, "Les fôrets de l'empire Ottoman," p. 322.

⁶⁹⁵ Ibid., pp. 322-23.

example, the forests around the Vardar provided considerable quantities of wood, such as sleepers, timber for bridges, stations and telegraph poles, for the construction of the railway line between Thessaloniki and Skopje. When the line was completed, they came to provide the whole fuel wood needed for the engines of the trains.⁶⁹⁶ Bricogne says that the price of firewood was relatively low due to the low population and lack of outlets for trade. Thus, the railway company, instead of substituting firewood with pit coal, which was to be imported from England, continued to exploit fuel wood for making 60 percent profit.⁶⁹⁷ Though there were coalfields in Zonguldak and unexploited brown coal fields in certain regions of the Ottoman Empire, the transportation costs seemed to be more expensive than bringing it from England. Bricogne complains that since the Ottoman government did not put sufficient pressure, the company did not consider it as a problem. However, he adds that the company proposed to modify the heating surface of the engines to operate the trains with pit coal. The fuel wood consumption was considerable, more than 150,000 *çekis* (37,500 metric tons) per year. Bricogne calculates that had the government received two or three *guruş* per *çekis*, this consumption would provide the treasury with an important income (about 75-112.5 millions *guruş*) even though it would harm the forests largely.⁶⁹⁸

5.6. Conditions of Ottoman Forests and Forest Use

The French experts, after undertaking initial surveys in forests of Anatolia and the Balkans, claimed that almost all forests were in very bad condition. The forests were degraded by various abuses, in which one could see glades elsewhere.

⁶⁹⁶ Ibid., p. 324.

⁶⁹⁷ Ibid.

⁶⁹⁸ Ibid.

The most ruined ones were deprived of trees of different age groups. In many regions, the consistent character was the absolute absence of any succession of intermediate ages among young plantations and old-growth. On the other hand, due to difficult transport facilities, the montane forests were usually covered with old-growth trees.⁶⁹⁹ Bricogne explained his disappointment in the forests of the Danubian province as: “*En présence d'une ruine aussi accentuée, l'on ne peut qu'éprouver un profond sentiment de découragement. Ces forêts ne présentent plus aucun intérêt, il faut désespérer de leur avenir.*” [“In the presence of such ruinous condition, one can only feel a strong discouragement. These forests are not presenting any interest but despairing of any future expectation.”⁷⁰⁰

However, his comments on the Ottoman forests are to be read with caution, because nearly every practitioner of scientific forestry overlooked the real conditions of forests. They, as a principle, did prefer young to old growth and coniferous to deciduous trees due to the possibility of commercial exploitation. They tried to rearrange the forest through working plans by ways of *aménagement* and silviculture. Furthermore, they advocated for a strict supervision of forests to reduce the level of local exploitations, in other words the ‘irrational’ and excessive cuttings by the local people.⁷⁰¹ The French experts espoused that real possibilities

⁶⁹⁹ Bricogne, “Les forêts de l’empire Ottoman,” pp. 281-82. Bricogne, *Ormançılık Heyeti*, pp. 46-50.

⁷⁰⁰ Bricogne, “Les forêts de l’empire Ottoman,” p. 281. Translation is mine.

⁷⁰¹⁷⁰¹ Research by several historians and anthropologists suggests that many colonial scientists and commentators were biased and incorrect in their assumptions about the relationship between deforestation and local resource management. For example, in a widely cited article and book James Fairburn and Melissa Leach have argued French colonial conservators had ‘misread the African landscape’ and ‘read forest history backwards’, disregarding the indigenous protection of forests and woodlands. James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and Ecology in a Forest-Savannah Mosaic* (Cambridge: Cambridge University Press, 1996); James Fairhead and Melissa Leach, “Reading Forest History Backwards: The Interaction of Policy and Local Landuse in Guinea’s Forest-Savannah Mosaic,” *Environment and History* 1, no. 1 (1995). As such, Davis’s study on the nineteenth century narratives about colonial North Africa

of forests could hardly maintain the material needs of the populations. For example, Bricogne provided that even a small rural household, apart from the non-heating purposes, consumed more than fifty cartloads (each weighs from 250 to 350 kilograms of fuel wood) annually, which was an alarming figure for the totality of the consumption in the countryside.⁷⁰² Other industries, such as the sawmills, the free manufacture of barrel staves by the peasants, the extraction of touchwood from resinous (coniferous) trees, mostly from the laricio (Corsican) pine (*Pinus nigra subsp. laricio*), the extraction of tar constituted the means of degradation of forests in Bosnia and Herzegovina.⁷⁰³ However, the experts did not only blame the local people. Bricogne stated that since the local authorities and the property owners squeezed the peasants by taxes and other exactions, they restrained themselves from agriculture and obtained their living from forest products. Moreover, he added that if the forest administration was applied in all its rigor, it would bring more resentments on the part of the local inhabitants, especially in Bosnia.

The experts' reports focused on the carrying capacity of surveyed forests. For example, they criticized the preference of oak species for firewood and charcoal production, especially in the forests of the Black Sea coast, which provisioned the capital and local consumption centers with firewood and charcoal. The proximity of the sea, the relatively easy conditions of removing products from forests, and the proximity of the market accelerated these exploitations in a milieu of always increasing demand.⁷⁰⁴ Bricogne claims that if the government did not control this

displayed that the French version of environmental history of the Maghreb have been distorted by the accusations of North African pastoralists for deforestation and desertification. D. K. Davis, "Desert 'Wastes' of the Maghreb: Desertification Narratives in French Colonial Environmental History of North Africa," *Cultural Geographies* 11, no. 4 (2004).

⁷⁰² Bricogne, "Les forêts de l'empire Ottoman," p. 282.

⁷⁰³ *Ibid.*, p. 278.

⁷⁰⁴ *Ibid.*, p. 287.

demand, the beautiful oak forests would be ruined, though groves (*korular*) were pretty much destroyed; the young pole plantations (*serenlik*), used especially for construction, would be plundered until the land becomes a desert. To show the high consumption in the forests of Aydos and Burgaz, he calculated that a section of the forest, around 20,000 hectares provided annually more than 150,000 *çekis* of firewood and 5 million *okkas* of charcoal; that is to say approximately 75,000 cubic meters of firewood and 6,400 metric tons of charcoal.⁷⁰⁵ Considering that the total area of these forests was estimated to be 80,000 and 90,000 hectares, Bricogne was trying to say that in four or five years these forests would totally be diminished. To safeguard the future of these forests, which could still become materially and financially very productive, the experts proposed to prohibit the felling of oak trees and to restrain the exploitation of the other species. However, neither they nor the government could contend with timber merchants from Istanbul, who provisioned the firewood and charcoal supplies of the city.⁷⁰⁶

In the Balkans another big consumer of forests was the iron industry. For example, Bosnia was rich in iron ores and there were many furnaces in its districts, which Bricogne resembled to those Catalan forges in the Pyrenees.⁷⁰⁷ These furnaces consumed heavily the oak and the beech forest regardless of their cutting season. The ironmakers burned charcoal within the forests and the frequent fires destroyed the forests neighboring these furnaces. Moreover, the owners of these furnaces claimed also the possession of the mines and forests. Besides, they were granted a right of the 20-22 percent of the gross product, whereas the central treasury only got one-tenth of the value of the remaining iron. On the other hand, Bricogne stated, this iron industry required a great amount of firewood. Besides, the taxes on the manufactured product prevented the owners to compensate the

⁷⁰⁵ Ibid., p. 288.

⁷⁰⁶ Ibid., p. 287.

⁷⁰⁷ Ibid., p. 277.

expensive transport costs of charcoal from distant regions. Thus many of these furnaces were extinguishing and the country would lose, in a near future, this important local iron production, which was consumed mainly in the surrounding localities and the surplus being exported with lower costs to Belgrade and Serbia.⁷⁰⁸

The local consumption of forest products had also many other distinctive patterns, which believed to cause considerable exploitation as the experts, reported. Enclosing farmyards, gardens, fields, meadows and even certain private forests with fences, or with palisades of oak slivers that were essential for safety reasons, and for preventing common grazing, were examples of such patterns.⁷⁰⁹

Moreover, apart from these exploitations, some other causes also caused the depletion of forests. His examples were the fire used to regenerate grasslands, the slash-and-burn practices to prepare land for temporary cultivation, the clearings carried out gradually on large tracts by the immigrant settlers. Bricogne gives an interesting example about the use of montane forests, which I did not yet encounter in the archival documents. The drover Wallachian tribes, who spend the winter in the plains of Thessaloniki and the summer on the plateaus of Rhodopes made use of fire in the mountains for cattle grazing. Besides, they claimed right of ownership to these montane forests, without any title, and they used force to grant exploitation permits to Bulgarian peasants.⁷¹⁰

As was stated earlier, the main concern of the Ottoman government was making the forest financially more feasible. The forest experts proposed in every occasion to market old-growth trees withering on the hoof or lying on the ground to increase the pecuniary resources and with an aim of cleaning the forests from the old trees, which harmed the underwood.⁷¹¹ However, the reluctance of the

⁷⁰⁸ Ibid., pp. 277-78.

⁷⁰⁹ Ibid., pp. 277.

⁷¹⁰ Ibid., p. 285.

⁷¹¹ Ibid., p. 283.

government to export the timber of these trees to Europe in fear of a raise in the price of firewood prevented the forest service from successfully realizing this aim, especially in the 1860s. On another hand, Bricogne says that the villagers refused to take these old-growth trees that the administration offers for free and continued to exploit the young species. Under these conditions, he adds, the revenues could not be increased to the level of expectations.

In short, forest experts accused the Ottoman peasants of being profligate in their use of timber for fuel, construction and grazing. They saw also the shifting cultivation, which was practiced in different forms in many parts of the Empire, as a major cause of the destruction of the environment.

It is interesting to note that British consuls in the Ottoman Empire mentioned more or less the same complaints. To quote one:

The new law is theoretically all that could be desired, but in practice it has not ameliorated the development of forestry to any appreciable extent, owing, in great part, to negligence on the part of local authorities and to the absence of roads. The former is responsible for the havoc played by the frequent fires due to the ill-will of shepherds and woodcutters, and for the indiscriminate felling of timber by villagers, and the latter is accountable for the gradual decay of trees out of reach of woodcutters. The regulations provide for the punishment of incendiaries, but legal proceedings have rarely procured a conviction. In no locality has the Administration been known to have taken any steps to enforce, to any appreciable extent, the plantation of young trees, though in a few districts it has been encouraged to some extent. In general terms the Government have apparently not yet thoroughly woken up to the importance of the beneficial influence of forests from a physical, economic, and hygienic point of view. Woods have always been neglected and trees cut down without replacing them, but since the establishment of a Forest Department, and the appointment of local forest officials, the process has become disastrously rapid. Formerly the villagers would waste their wood, but were able to prevent damage by others, but now anyone can obtain for a small sum a permit to export charcoal, and it is to the interest of the forest official to grant as many of these permits as possible.⁷¹²

⁷¹² Consular Reports, no. 589, Foreign Office, May 1903, p. 24. Quoted in: George Young, *Corps de droit Ottoman: recueil des codes, lois, règlements, ordonnances et actes les plus importants du droit intérieur, et d'études sur le droit coutumier de l'empire Ottoman*, vol. VI (Oxford: Clarendon Press, 1906), p. 2fn3.

The previously mentioned new law was a decree of the Council of State on the protection of forests issued in 1903, which essentially increased the fines for cutting trees much higher than the earlier regulations.⁷¹³ Young claims: “It is true that a modest measurement of protection granted to the forests in [this] regulation published in 1903 will change the state of affairs once it will have been applied generally.”⁷¹⁴

5.6.1. Forest Protection and Communal Forests

The *baltaliks* were definite forest tracts assigned to the village and town inhabitants for the satisfaction of their subsistence needs. The administrative experience had displayed that bestowing *baltaliks* to local inhabitants and enacting the rules for local deliveries to preserve the state forests could not be applied in many regions of the Empire. For example, in many provinces the property owners and wealthy merchants struggled to acquire the right of enjoyment in these *baltaliks*, even when they received title deeds by using their power in the local councils and courts. As such, Bricogne claimed that since these people owned most of the land and the majority of the peasants were only sharecroppers, especially in the Balkans, the terms of tenancy mostly favored the landowners. However, immediately after the promulgation of the Land Code, the government redefined and enacted the terms of tenant-landlord relationship by introducing the *Bosna Nizamnamesi* in 1859, which was prepared by Cevdet Paşa.⁷¹⁵ As it may, constituting *baltaliks*, for Bricogne, meant alienating forests for the benefit of the landowners. Moreover, he claimed that since *baltaliks* were considered as

⁷¹³ *Servet-i Fünun*, 7 Ş 1321/29 October 1903. Cited in: *Ibid.*, p. 11.

⁷¹⁴ *Ibid.*, p. 11.

⁷¹⁵ “Bosna Nizamnamesi,” *Düstûr* 1. Tertib, vol. I (1859).

belonging to the villages in the Forest Regulation, creating and then redistributing them after taking control of the forests would also mean, to some extent, to recognize ‘feudal rights,’ which were abolished, at least in theory, nearly half a century ago.⁷¹⁶ Although it is quite difficult to infer what he means, it seems that he was definitely against the idea of granting *baltaliks* from the Bosnian forests apart from the above-quoted drawbacks.

The experts also offered the government to exploit the forests especially those in the Balkans, by incorporating the network railways and other transportation routes. However, the exploitation of large trees was to be handled by timber companies, thus, a granting of concession was needed. For example, for the forests in Albania, since they were close to the sea (about two hours), the construction of roads and even of American railways⁷¹⁷ would lower the transport costs and create a rational and productive exploitation.⁷¹⁸ The experts urged the government to make profit from immense resources by converting them into fixed capital. However, the government rejected to follow up their plan to develop the forestry in Albania.⁷¹⁹ The export of timber to foreign countries from these regions was prohibited due to the political and administrative reasons. But, Bricogne claims that this policy prevented the commercial exploitation of forests, thus the central treasury was deprived of an important income and the local people of their means of sustenance.⁷²⁰

Bricogne accused the Ottoman government for not being consistent in its forest policy. He even implied that it was ignorant and not very enlightened about

⁷¹⁶ Bricogne, “Les forêts de l’empire Ottoman,” p. 277.

⁷¹⁷ The American type of railways are more effective than those of European railroads for cutting across valleys, which interrupted longer distances.

⁷¹⁸ Bricogne, “Les forêts de l’empire Ottoman,” p. 328.

⁷¹⁹ *Ibid.*, p. 329.

⁷²⁰ *Ibid.*

the fundamentals of the forestry science: an indifference to sustained yield, a carelessness and misappropriation by the agents of the government and pious foundations with regard to the forests. There existed, he says, several categories of forest property. For example, the forests known as *korus* owned by some villages and private individuals, in which the ground and trees are private properties. Then came the state forests, which were allotted to certain public services, such as the navy and artillery. A third category is composed of the *baltaliks*, forests delivered *ab antiquo* to the villagers, whereof the raw property belonged to the State but wood to the inhabitants. He claims that the *baltaliks* were half-property, because the villagers have the right to prevent any foreign person at the community from cutting wood, though they could not sell the ground nor clear it.

Between the forests of the state and the private property forests, there were also the *vakif* forests, which were formerly on the public domain, but which, in consequence of their special assignment with the pious foundations, did the Ministry of Pious Foundations, which received their incomes and took care of the expenses, administer. It seems that the experts were not satisfied with these multiple categories of forest lands, which made the management of forests difficult and exposed them to many attacks. But from the information given by Bricogne, we are informed that in the majority of the cases the villagers did not have any interest to protect *baltaliks*, because of the possibility of extending them indefinitely, but that they were still in good condition and that at least the clearing of them was prevented. He noticed especially that the village *korus* (groves) were particularly in a very satisfactory state of conservation.⁷²¹

⁷²¹ Ibid., pp. 333-34.

5.6.2. Desiccation and Afforestation

While afforestation needed to be an important component of the new forest policies, plantation-like forest lands were not established until the early twentieth century. Until then, attention was reserved exclusively to squeezing the maximum revenue out of the forests already in existence. However, the government considered the supply of water to Istanbul an important concern.

The reservoirs (*bends*) in the Halkalı valley and Belgrade forests were providing the city with water from the earliest times. The superintendent of the water conduit workers (*su yolcuları nazırı*) was responsible from the well-being of the reservoirs and conduits.⁷²² The desiccation was one of the biggest problems of the commercial forestry. The effects felt by the British forest administration in India awakened professional foresters on the detrimental effects of monoculture forestry.⁷²³ Since the French forestry gained experience during the reforestation of montane forests, the French experts proposed the afforestation of the glades in the Belgrade forests to eliminate the water famine. According to his estimates, within the last thirty years, more than one third of these forests, which formerly covered 12,000 hectares, were depleted. But Bricogne says that, the government did not carry out this project.⁷²⁴ The forest of Belgrade is not the object of regular fellings,⁷²⁵ but the exploitations consisted of clear cuttings and extraction of old

⁷²² Halil İnalcık, "Ma' (Irrigation in the Ottoman Empire)," in *Encyclopedia of Islam*, ed. H. A. R. Gibb et al (Leiden: Brill, 1960-).

⁷²³ Rajan, "Imperial Environmentalism or Environmental Imperialism?," pp. 343-58.

⁷²⁴ Bricogne, "Les fôrets de l'empire Ottoman," 329-30.

⁷²⁵ Shelterwood systems/cuttings are systems of regeneration applied to the regular groves in order to ensure a source of seeds and (or) protection necessary to regeneration. The principal settlement (the shelter) is removed into two or several progressive cuts. Goodall, *Dictionary of Human Geography*.

trees. Bricogne mentions that they could not practice standard cuttings in the adjoining sections because of the opposition by the administration of waters (*sular idaresi*). He further adds that it was impossible to convince this ‘ignorant’ and ‘prejudiced’ service that the forest was to be managed and exploited in a sustained way and that the reservoirs would by no means endangered by it.⁷²⁶

Although there is not much information on desiccation in other regions of the Empire, it seems that it was a big problem in Istanbul. On 13 March meeting of the Royal Geographical Society in London, Lord Stratford de Redcliffe also mentioned this problem. During the meeting, one of the members claimed that the reason of the desiccation were the geological changes caused by volcanic eruptions, earthquakes, and opening of fissures dried rivers and lakes. (i.e. Dr. Livingstone). On the other hand, other members insisted on human factors. For them, the reason was the felling of timber and burning of pastures by the local people and settlers.⁷²⁷ Redcliffe was on the side of the second group. He mentioned that a couple of years ago, the government gave permission to cut down the timber in this forest, but speculators took advantage of this permission and arranged excessive cuttings in the forests. But when the negative effects began to be felt, the government interfered and restricted the fellings.⁷²⁸

Besides these two accounts, it seems that the felling restrictions were strictly followed until the beginning of the twentieth century. But since the *aménagement* and silvicultural methods were not applied in these forests, the restrictions became detrimental to the well-being of the trees. In a decree dated 27 June 1907, we are informed that for about twenty to thirty years, only the underwood was tendered from these forests. The Minister of the Privy Purse explained to the Grand Vizierate

⁷²⁶ Bricogne, “Les forêts de l’empire Ottoman,” p. 330.

⁷²⁷ James Fox Wilson, “On the Progressing Desiccation of the Basin of the Orange River in Southern Africa,” *Proceedings of the Royal Geographical Society of London* 9, no. 3 (1864-1865): pp. 107-8.

⁷²⁸ *Ibid.*, p. 109.

that though these forests around Istanbul were beneficial to the public health and beauty of landscape, when the committee of experts were controlling these forests, they realized that they became very dense during these years, which badly affected the health of naturally-growing trees. This thickness also made it difficult to control summer fires. He told the Grand Vizier that accumulated decayed and useless trees, which could provide the firewood and charcoal allowances of the Imperial Palaces' timberyard (*hatab anbarı*). The experts proposed to practice coppicing. According to this method, the ten percent of the total forest area, which was 60,000 *dönüms*, would be cleared each year. This *aménagement* also could bring 500,000 *guruş* for this year and 1,000,000 *guruş* in the future to the treasury.⁷²⁹ Since there was a great discrepancy between the total forest area provided by Bricogne and the minister, we may assume that this petition was only requested for a small tract within the Belgrade forests. Nonetheless, the Grand Vizierate approved to practice coppicing in this section of the forest.⁷³⁰

5.7. Problems with Common Resource Use

Despite the modernist approach of the Ottoman state, administrative tools for preventing forest clearances remained very limited. Local people converted forests to alternative uses through firing, either for cultivation or for grassland.⁷³¹ Peasants burned down forests and cultivated crops in the reclaimed forests to escape from paying tithes (*öşr*) to the government. But another reason might be to balance the excessive taxation claims of government with the additional revenue from such

⁷²⁹ BOA, *Y. MTV. 299/117* (16 Ca 1325/27 June 1907).

⁷³⁰ BOA, *Y. MTV. 305/89* (16 Z 1325/20 January 1908).

⁷³¹ HK, *Doc. No. 264* (25 C 1297/4 June 1880).

newly acquired tracts. One should keep in mind that considerable parts of agricultural land were worked by the method of slash-and-burn agriculture (or shifting cultivation). Since the method of slash-and-burn agriculture became unproductive in a couple of years, the villagers had to shift to other forest tracts once the productivity of land declined.

A crucial factor leading to forest clearances was the need for new grasslands. We know that big property owners (mostly having dairy farms) and small farmers reclaimed forest lands to provide grassland for their cattle and sheep. They could encroach upon former reclaimed lands used for cultivation as well. Small cultivators presumably converted forest land to cultivation for subsistence purposes. On the other hand, big dairy farmers might have been motivated by commercial reasons. Prior to the Forest Regulation of 1870, villagers were allowed to convert *cibal-i mubaha* forests to pasture or cultivation. But after the enactment of the Regulation, the process became unlawful. The government considered the peasant who cleared the land as the possessor of the land and the land came to be considered as state land and subjected to the rules of possessing state land before the Forest Regulation of 1870. The Regulation did not legalize the status of such acquired forest lands. Even after the clearances, these lands were considered as forest.

5.7.1. Settlement of Immigrants In and Around Forests

International developments had an indirect effect over land issue in the Ottoman Empire. In some regions of the Empire, the pressure on land increased with the waves of migration after the Crimean War. Between 1856-57, 1860-62, and 1864-65, there were great waves of immigration from Crimea.⁷³² These

⁷³² Abdullah Saydam, *Kırım ve Kafkas Göçleri (1856-1876)* (Ankara: Türk Tarih Kurumu, 1997), p. 81.

migrations continued during the second half of the 19th century, increasing largely after the Russo-Ottoman War of 1877-78. Territorial losses of the late nineteenth century also accelerated the movement of immigrants. For example, for the immigrants settled in Serrez, the government allotted the *miri* forests.⁷³³ Moreover, the immigrants incoming from Crimea were resettled in Varna and Balçık; the immigrants coming to Köstence to the forests of Silistre and Şumnu; the ones coming to Burgaz to the forests of Fakih mountain; and the all the Nogay Tatars to the forests of Babadağı, Isakçı, and Maçın before the spring to protect them from the harsh winter conditions.⁷³⁴ Besides the transportation costs, the government also compensated their initial food allowances.⁷³⁵ Their immediate needs, such as firewood, charcoal and construction materials were provided either by the local officials, or by themselves. If there were no woodlands around, the officials worried about the provisioning of fuel and asked the government as to how they could provide it.⁷³⁶

The government allotted woodlands to the immigrants for their immediate needs of construction materials, firewood, and alike. For example, the government allowed free timber (exempted from taxation) from the state forests for constructing the houses of immigrants. Although these initial measures were considered to be a nonrecurring privilege, it was seldom applied during the course of time. Many immigrant villages continued to exploit forests even after their indispensable needs were satisfied.⁷³⁷

⁷³³ BOA, *A. MKT. MHM.* 222/12 (30 Za 1277/9 June 1861).

⁷³⁴ BOA, *A. MKT. UM.* 433/8 (7 R 1277/23 October 1860).

⁷³⁵ BOA, *A. MKT. MHM.* 222/12.

⁷³⁶ BOA, *A. MKT. UM.* 517/3 (13 Ca 1278/16 November 1861).

⁷³⁷ Although many archival documents mention that they were settled extensively in forested regions, the studies on place-names and settlement morphology of Ottoman villages would make it possible to undertake a systematic and diachronic, or even synchronic, analysis of the conditions of forest settlements

The government also subsidized the immigrants' agricultural activities with farm implements, loans and tax exemptions; and in some cases with cattle, sheep, and goats. In due course, the central government received many letters of complaint from the local forest officials about the forest clearances by these immigrants. There were also conflicts between these immigrants and local inhabitants on the use of non-timber forest products. The government, upon the increase of similar resentments, decided to remove some of these immigrants from these locations and resettle them to other places.⁷³⁸ On 2 December 1893, the Ministry of Forests, Mines, and Agriculture ordered that the village inhabitants were to indemnify the would-be harms caused by the emigrants settled in or around the *miri* forests.⁷³⁹

and exploitations during this period. A couple of important studies on the settlement morphology of villages in Turkey are: Necdet Tunçdilek, *Türkiye'de Yerleşimin Evrimi* (İstanbul: İstanbul Üniversitesi Yay., 1986). Necdet Tunçdilek, *Türkiye İskân Coğrafyası: Kır İskânı (Köy-Altı İskân Şekilleri)* (İstanbul: İstanbul Üniversitesi Edebiyat Fak. Yay., 1967). But, a few local studies on the geography of settlements of the Ottoman cities provide certain data for making assumptions about forest exploitation. For example, a study on Eskişehir (western central Anatolia) has displayed that only forty-two percent of 230 villages were established prior to the eighteenth century, which means that almost sixty percent have been founded following the massive immigration movements of the late eighteenth and the nineteenth centuries, especially from the Balkans, Crimea and the Caucasus. Necdet Tunçdilek, "Eskişehir Bölgesinde Yerleşme Tarihine Bir Bakış," *İ. Ü. İktisat Fakültesi Mecmuası* (1950-54). Cited in: Yerasimos, *Az gelişmişlik Sürecinde Türkiye*, p. 25. This example gives us a clue about the possible degree of forest clearings experienced in the nineteenth century.

⁷³⁸ For instance, the immigrants in Biga were sent back to Gelibolu. BOA, *DH. MKT. 1566/70* (16 Ra 1306/20 November 1888). The emigrants coming from Hezargrad who were settled within the vakıf forests on the Istranca mountain were forced to leave, but this decision caused the dissent of the emigrants and a couple of villagers arrested. BOA, *DH. MKT. 1469/73* (28 Ra 1305/14 December 1887). BOA, *DH. MKT. 1469/73*. Even the immigrants from Rumelia were returned from Balya (Karesi) because of the region were mostly forested and also it was stated that there were almost no cultivable land. BOA, *DH. MKT. 1425/50* (20 N 1304/12 June 1887). For other similar documents, see: BOA, *A. MKT. MHM. 501/60* (12 B 1308/21 February 1891). BOA, *A. MKT. MHM. 523/12* (11 R 1321/7 July 1903). BOA, *A. MKT. MHM. 517/25* (15 Z 1319/25 March 1902). BOA, *Y. PRK. OMZ. 3/2* (18 C 1319/2 October 1901). BOA, *A. MKT. MHM. 510/36* (3 B 1318/27 October 1900).

⁷³⁹ *Muharrerat-ı Umumiyye*, no. 88, 20 Teşrin-i sani 1309/2 December 1893.

This was the forerunner of the subsequent policies which instigated to prohibit the settlement of emigrants in or near forests. But it was also a dangerous one, which might cause many conflicts among the resident villagers and incomers.

During the first phase of the immigrations, the Ministry of Trade was responsible for the settlement in the provinces. At first glance, this policy seemed to be beneficial for the spread of cultivation on the state lands, but later, when the numbers of immigrants increased more than the handling capacity of the Ministry of Trade, a special commission (*Muhacirin Komisyonu*) was established on 5 January 1860 to regulate settlements and provisions.⁷⁴⁰ In 1864, the commission specified eight regions, where the settlements would take place henceforth, and sent special agents to these regions to give an order to the haphazard settlements. These regions were: Bursa-Kütahya-Karesi, Konya, Ankara, Kocaeli-Kastamonu-Bolu, Izmir (Aydın), Amasya-Canik, Sinop-Sivas, Trabzon.⁷⁴¹ Despite the existence of vast arable lands, these regions possessed also very rich forests. For example, according to the late nineteenth century figures, the forests in these provinces represented almost 60-65 percent of the total forest area in the Ottoman Empire.⁷⁴² However, in 1872, the government repealed the offices in Bursa, Aydın, and Trabzon because of the warnings by the Forest Administration about forest degradations. However, the real resistance of the Forest Administration emerged especially in the 1880s. The emigrants who were settled within forests after the Crimean War caused many troubles to the Forest Administration. For example, the forest inspector in Silivri prevented the immigrants from obtaining timber for construction from the *miri* forest around the Turhallı village, but the Ministry of

⁷⁴⁰ Saydam, *Kırım ve Kafkas Göçleri (1856-1876)*, p. 106. The commission dealt with the settlement of immigrants until the reorganization of a directorate, the *İdare-i Umumiyye-i Muhacirin*, in 1878. Saydam, *Kırım ve Kafkas Göçleri (1856-1876)*, p. 118.

⁷⁴¹ Saydam, *Kırım ve Kafkas Göçleri (1856-1876)*, p. 112.

⁷⁴² See the Tables 17 and 18. above for the percentages.

Internal Affairs sought to eliminate this decision.⁷⁴³ The next year, the government entirely prohibited the settlement of immigrants within the forests, but for the settlements in the neighborhood of forests, it was ordered that the conditions of the forests were to be observed carefully by taking the opinion of forest inspectors.⁷⁴⁴ Before the settlement of emigrants, the local forest officials were to survey the region and mark the suitable trees before the fellings took place.⁷⁴⁵ Then the Ministry of Forests, Mines, and Agriculture and the *Muhacirin Komisyonu* together discussed the results of these surveys and informed the Council of State on their findings. But the emigrants were not allowed to settle down, unless the Council gave a sanction to their settlement.⁷⁴⁶

With certain dispatches in 1885, 1900, 1901, and 1902, the local forest officials were entrusted to strictly control the application of rules that proscribed the settlement of emigrants within or near forests.⁷⁴⁷ The Ministry also entitled the officials to take necessary and perpetual precautions to prevent the harms given by these settlers to forests.⁷⁴⁸ Finally, in February 1902, the dispatch from the Ministry informed the local officials that the settlements of emigrants within or near forests were prohibited.⁷⁴⁹

⁷⁴³ BOA, *DH. MKT. 1451/10* (08 M 1305/26 September 1887).

⁷⁴⁴ BOA, *DH. MKT. 1532/20* (04 Z 1305/12 August 1888). BOA, *A. MKT. MHM. 530/49* (18 Ş 1312/14 February 1895).

⁷⁴⁵ *Muharrerat-ı Umumiyye*, no. 48, 26 K 1304/7 February 1889.

⁷⁴⁶ *Ibid.*, no. 34 (6 Eylül 1310/18 September 1894).

⁷⁴⁷ BOA, *A. MKT. MHM. 510/21* (07 Ca 1318/2 September 1900).

⁷⁴⁸ *Muharrerat-ı Umumiyye*, no. 46, 24 Kanun-i sani 1300/5 February 1885. *Muharrerat-ı Umumiyye*, no. 50, 14 Ka 1316/27 December 1900. *Muharrerat-ı Umumiyye*, no. 28, 6 Haziran 1317/19 June 1901. *Muharrerat-ı Umumiyye*, no. 52, 11 Eylül 1317/24 September 1901.

⁷⁴⁹ *Muharrerat-ı Umumiyye*, no. 72, 2 Şubat 1317/15 February 1902.

5.7.2. Challenges to Forest Administration: Fires and Other Depredations

The Forest Administration from its foundation onwards, faced a series of problems and challenges relating to the preservation of the existing forests. These problems included issues such as forest fires, illegal title deeds, the problem of immigrants, and alike. However, the Forest Administration also had to deal with bureaucratic problems closely related to its effective functioning.

Before the strict rules on the control of forest fires by the Forest Administration, the Imperial Shipyard and also the local administration officials and timber officials did not bother much about fires except those ignited in the reserved forests of the Shipyard. For example, the governor of Izmid and the timber official told the Imperial Shipyard that local people to convert the land to gardens and vineyards ignited forest fires, but they were not touching the reserved forests.⁷⁵⁰

The government sent several dispatches to the local provinces in the 1850s. It warned the local governments to prevent forest fires ignited by peasants to open forests for agriculture. The major purpose of these orders was the protection of forest for Shipyard's needs. The government prohibited clearings in *cibal-i mubaha*, *çiftlik* and village meadows and *vakıf* forests. For other lands, the peasants were to apply the local governments for taking permission to clear wastelands for cultivation. The local directors of agriculture (*zira'at müdürleri*) were to supervise the processes in accordance with the instructions they were given. The local governments, on the other hand, were to protect the village coppices, *miri*, private and shipyard's forests from fires and other destructions. Many provincial governors replied that they were doing their best to protect forests within their jurisdictions.⁷⁵¹

⁷⁵⁰ BOA, A. AMD. 48/92 (05 Z 1269/10 September 1853).

⁷⁵¹ BOA, A. MKT. UM. 120/46 (25 Ra 1269/6 January 1853); BOA, A. MKT. UM. 122/44 (7 R 1269/18 January 1853); BOA, A. MKT. UM. 124/2 (3 R 1269/14 January 1853).

Among these replies, only the *mazbata* of Canik subprovince was signed by all the members of the local administrative council, including the Greek and Armenian *kocabaşıs*.⁷⁵²

In the 1880s, the forest administration again sent numerous warnings to the local authorities stressing the importance of protecting and developing forests and taking necessary precautions to prevent forest fires. The persons who burnt trees or gave harm to them were to pay cash fines. The Forest Administration strictly enforced the local officials to register these cash fines taken from unlicensed fellings by local inhabitants. But due presumably to the disincentive of pecuniary fines, the government imposed another penalty on ignition of fires. This penalty was applied to forest fires as well. An imperial decree on June 1306 (June 1890) supplanted the 163rd and 164th articles of the Penal Code. Briefly, the new clause stated that if someone fired out dwellings, ships, groves, forests, or agricultural produce wittingly that person shall be exiled permanently or temporarily with hard labor (*kürek cezası*) on the condition that the thing in question did not belong to the incendiary. But if the person owned that thing, or property, s/he should be punished temporarily with the same punishment.⁷⁵³

There was a tendency to standardize and categorize the causes of fires and the measures for extinguishing them.⁷⁵⁴ The central administration was occasionally sending instructions to the officials on methods for quenching fires. The officials were to prepare a report on the species and quantity of trees that were consumed by fire. Several instructions were sent to local forest officials and inspectors indicating the procedures for preventing and extinguishing fires after 1880s. The local officials were to send letters on types of forest destruction other than fires as well. These letters recorded and classified in tabulations (*cedvel*), especially after 1880s.

⁷⁵² BOA, *A. MKT. UM. 122/44*, supplement 1.

⁷⁵³ *Muharrerat-ı Umumiyye*, no. 17, 30 Haziran 1306/12 July 1890.

⁷⁵⁴ *Ibid.*, telegram 31, 31 Ağustos 1303/12 September 1887.

But the central forest administration mentioned the difficulty of recording the causes of destructions on printed papers because of their variety. This shows that categorizing these causes remained problematic even after the codification of rules and regulations. Additionally, because some of these letters from the local officials did not say much about the instigators and incendiaries' names and professions, the central government warned the officials to include factual evidence (*ihiticac*) clearly in the charge sheets (*zabit varakaları*) on fires and other forest destructions.⁷⁵⁵ The inspectors and officials were liable for taking necessary precautions for preventing conflagrations and discovering and arresting the incendiaries after starting of a fire. The forest officials and inspectors were responsible to catch persons who fired down forests. Any negligence on the part of these officials was considered an offence against the regulations.⁷⁵⁶ The forest guards who tolerated fires and destructions in order to get reward (*ihbariyye*) were forced to resign from office.⁷⁵⁷ The forest officials who were found negligent in the opening of forest land to cultivation and cattle browsing on fired tracts were dismissed from office.⁷⁵⁸ On the other hand, the forest officials who were intolerant to these acts and endeavored to put out fires were gratified.⁷⁵⁹ The government warned local officials to be more careful about forest fires during severe droughts.⁷⁶⁰

Except for taxes and other official dues and fees (*tekalif-i emiriyye*), the ordinary courts of justice were responsible for the conflicts upon simple agreements

⁷⁵⁵ Ibid., no. 14, 5 Haziran 1311/17 June 1895.

⁷⁵⁶ Ibid., no. 56, 28 Temmuz 1309/9 August 1893.

⁷⁵⁷ Ibid., no. 25, 5 Eylül 1314/17 September 1898.

⁷⁵⁸ Ibid., no. 54, 19 Teşrin-i evvel 1318/1 November 1902.

⁷⁵⁹ Ibid., no 71, 26 Kanun-i sani 1318/8 February 1903.

⁷⁶⁰ Ibid., see telegrams on 18 Haziran 1314/30 June 1898 and 29 Nisan 1316/12 May 1900.

and transactions among litigants.⁷⁶¹ The appeals for unlicensed fellings, stripping of pine barks, and causing of fires were sent to the *Nizamiyye* Courts.⁷⁶²

The central administration warned the forest inspectors and officials not to content themselves with presenting only warrants about forest fires and other harms done by individuals or contractors, to the local councils of administration (*mahalli meclis-i idare*). The officials were to take the litigations against individuals demanding seizure, cash fine, or indemnity in exchange for harms to the *Nizamiye* courts without delay.⁷⁶³ Before lodging complaints against felonies, a detection commission (*heyet-i keşfiyye*) was to be formed to be responsible of in depth inquiry and for obtaining conclusive evidence to bring the culprits into courts.⁷⁶⁴

The local officials were allowed to bring the court orders, concluded against the administration before the Court of Appeals and then if necessary to Court of Cassations without asking the central administration beforehand. Forest officials whose negligence in commencing and following litigations against offenders who had given damages to the central treasury, would be removed from office for the time being. Such officials were to compensate the damages all by themselves.⁷⁶⁵ The administration instructed the inspectors and officials not to embody anew the causes of abrogation stated in the verdicts, in either the presence or absence of the officials as plaintiffs in front of the examining magistrate. But, the forest inspectors were to be present in the hearings to defend the rights of the central administration.

⁷⁶¹ Ibid., no. 23, 27 Ağustos 1300/8 September 1884.

⁷⁶² Ibid., no. 30, 15 Eylül 1303/27 September 1887.

⁷⁶³ Ibid., no. 13, 18 Mayıs 1310/30 May 1894.

⁷⁶⁴ Ibid., no. 26, 15 Eylül 1304/27 September 1888 and no. 8, 4 Haziran 1307/16 June 1891.

⁷⁶⁵ Ibid., no. 51, 20 Kanun-i evvel 1316/2 January 1901 and no. 25, 3 Haziran 1317/16 June 1901.

In the absence of inspectors, the head guards were held to make the statement of defense before the court.⁷⁶⁶

5.8. Appropriation of State Forests

The development of market relations and the rather easier transport facilities in western Anatolia increased the value of forest lands and their output. The major consequence of these improvements was the illegal seizure of forests. Mainly, the *çiftlik*s (large estates) which were specialized in export trade began to lay claim over large areas of forested lands after 1875.⁷⁶⁷ The decree below demonstrates such a case. In a letter to the Council of State dated 15 July 1894, Selim Melhame, the Minister of Forests, Mines, and Agriculture, wrote that the forest tax due from the pine barks and wood gathered from forests, which were contentiously claimed as private property in the district of Menteşe (Aydın), should be collected in advance as a deposit. In a telegram received by the Aydın province forestry head-inspectorate on 25 August 1894, the owners in question stated that they have already contracted for the sale of the pine barks and other produce with certain traders and that even the cargo ships were already arranged. They requested permission to take the wood and the bark out of the forest solely with a guarantee bond/security bond (*teminat*) and added that if not, their losses would have to be reimbursed. The head-inspectorate inserted its view that such a case would be against both *çiftlik*-owners' and treasury's interest. Selim Melhame wrote to the Council of State saying the inspectorate should be instructed to allow transport

⁷⁶⁶ Ibid., no. 23, 14 Temmuz 1313/26 July 1897.

⁷⁶⁷ This trend seemed to have began in the early nineteenth century when a relative freedom in the export of grain and forest products boosted the formation of *çiftlik*s in the subprovince of Menteşe. Suraiya Faroqhi, "Mughla," in *Encyclopedia of Islam*, ed. H. A. R. Gibb et al (Leiden: Brill, 1960-).

from such forests only with a solvent guarantor, as the boundaries are not yet determined and that the legal recourse is still open for administrative appeals. Owners of such *çiftlik*s were accused of harming the miri forests by cutting excessive quantities of bark from the standing the trees, in defiance of scientific rules. Until the property issues with regard to such forests were resolved, it was decided to ban cuttings from the scientifically intolerant forests and removal of bark from standing trees, while a deposit was to be taken from the wood and bark from those forests scientifically fit. The insistence on the deposit for the tax due from the forests stemmed from the report of the inspector Kemal Efendi, who had stated that the guarantee bonds mentioned by the local government and the inspectorate was meaningless as they were often tolerant of *çiftlik* owners.⁷⁶⁸

⁷⁶⁸ BOA, *ŞD.* 518/4 (2 R 1312/3 October 1894).

Table 20: Areas of effectual forests; amounts of exported goods; received and due tithe and stamp tax of private and *vakıf çiftlik*s in Menteşe (Aydın), 1876-1892.

Name of the çiftlik	Effectual estimated area hectares	Total Exportation											Received tithe and stamp-tax			
		Timber cubic meter	Basket rod thousand	Touchwood tonnes	Pine bark tonnes	Pitch tonnes	Tar tonnes	Resin tonnes	Liquid- ambar oil tonnes	Storax tonnes	Charcoal tonnes	Firewood tonnes	Tithe		Stamp-tax	
												guruş	para	guruş	para	
1 Tuna Sekme	5313	6110.360				12.15	1.04					46369	36			
2 Kızıl Seki	250	732.417										5060				
3 Kara Yurtlak	6705	2989.750		41.8	1564.4					0.08	1023.6	1284	88951	17	5856	10
4 Tuzabad	10400	938.035			2259.55	1.539		11.876			261.3		69916	25	2032	20
5 Köşk	218										708.6				2718	
6 Kazıklı		237.730	15		818.5						5686.15	16223.5	13390	20	61257	20
7 Asın	3961	811.409	20		250.2			1.282			3589.15	16011	10355	10	40012	10
8 Yaş Yer	8205	10.045	107								215.5	3407	449	20	4433	20
9 Kerme-i cedid	7728	340.390			875.3	9.355					11.25		23422	10	88	
Hisarönü Söğüd-i																
10 Kilyos	19000	3857.126	852.5	271.7	1877.6				2.08	1	982.4	21508	80984	33	26282	12
11 Hamidköy	39900	4152.980	120		2235.05						179.2	56759	110789	6	47605	25
12 Köyceğiz	4700	708.833	559.6		498.25						301.3	17387	13747	7	17668	6
Dalyan with																
13 Tepearası	4500	15.090			13.75							296.5	460	20	231	20
14 Merkez	7500	8677.615	130		2266.4						2465.15	61563.5	156393	19	73463	17
15 Okçılar	2400	6576.461	50	54.5	976.9						235.6	7215.5	74241	18	7451	35
16 Eskere	5974	18681.213			1036.1								136317	20		
17 Kargı	2600	630.864	11		2885.25						2.12	307.7	13615	19	16046	14
18 Yenef	6611	530.306			134								4476	25		
19 Tuyarlar	1300															
Kızılyurd with																
20 Bördünce	2000															
21 Akçe Taş	1900															
22 Söğüd	1400															
23 Koca	2371															
TOTAL	144936	56000.624	1865.1	368	17691.25	23.044	1.04	13.158	2.08	3.2	15966.9	215270	899305	25	305147	9

Source: after BOA, *T. OMI. 1693/42* (21 Ra 1310/13 October 1892).

Table 21: Areas of seized forests; amounts of exported goods; received and due tithe and stamp tax of private and *vakıf çiftlik*s in Menteşe (Muğla), 1876-1892.

Name of the çiftlik	Seizured fores area hectares	Exportaion from the seized forests							Liquid-			Combustibles		Recieved tithe and stamp-tax		Due amount of tithe and stamp-tax calculated by the standing values	
		Timber cubic meters	Basket rod thousand	Touchwood tons	Pine bark tons	Pitch tons	Tar tons	Resin tons	ambar oil tons	Storax tons	Charcoal tons	Firewood tons	Tithe guruş para	Stamp-tax guruş para	guruş para	guruş para	
1 Tuna Sekme																	
2 Kızıl Seki																	
3 Kara Yurtlak	3660	1606		22.4	840.3						540	690	47794	3146		122508	
4 Tuzabad	1100	100			225.9	0.153		1.187			26.1		6991	203		25198.5	20
5 Köşk																	
6 Kazıklı																	
7 Asin																	
8 Yaş Yer	3365	15.045	107								215.5	3407	449 20	4433 20		15955.75	30
9 Kerme-i cecid Hisarönü Söğüd-i	1718	75			193.2	2.065					0.025		5171	19		21066.75	30
10 Kilyos	8200										423.9	9282		11185		26655.5	20
11 Hamidköy	8300	864	25		464.9						37.3	11807	23050	9903		77770.25	10
12 Köyceğiz Dalyan with	3523	453	416.725		371						224.4	12947	10237	13155		88799.25	10
13 Tepearası													27108				
14 Merkez	1300	1504	22.533		392.8						600.6	10670		12733		101310	
15 Okçılar													136317	20			
16 Eskere	67936	18681			1036.1											548444.5	20
17 Kargı																	
18 Yencf	5962																
19 Tuvarlar Kızılyurd with																	
20 Bördünce																	
21 Akçe Taş																	
22 Söğüd																	
23 Koca	1300	90			421.3					0.309	45	1988	9345	2343		46338	
TOTAL	106364	23388.045	571.258	22.4	3945.5	2.218	0	1.187	0	0.309	2112.825	50791	266463	57120 20		1074046	20

Source: after BOA, *T. OMI. 1693/42.*

Table 22: Percentage rates of seized forests in total forest area.

Name of the çiftlik	Effectual estimated area	Seized Area of forests hectares	Total area	Percentage of the seized forests
Tuna Sekme	5313		5313	0
Kızıl Seki	250		250	0
Kara Yurtlak	6705	3660	10365	35.3
Tuzabad	10400	1100	11500	9.6
Köşk	218		218	0.0
Kazıklı				
Asin	3961		3961	0.0
Yaşyer	8205	3365	11570	29.1
Kerme-i cedid	7728	1718	9446	18.2
Hisarönü				
Söğüd-i Kilyos	19000	8200	27200	30.1
Hamidköy	39900	8300	48200	17.2
Köyceğiz	4700	3523	8223	42.8
Dalyan with				
Tepearası	4500		4500	0.0
Merkez	7500	1300	8800	14.8
Okçılar	2400		2400	0.0
Eskere	5974	67936	73910	91.9
Kargı	2600		2600	0.0
Yenef	6611	5962	12573	47.4
Tuyarlar	1300		1300	0.0
Kızılyurd with				
Bördünce	2000		2000	0.0
Akçe Taş	1900		1900	0.0
Söğüd	1400		1400	0.0
Koca	2371	1300	3671	35.4
TOTAL	144936	106364	251300	42.3

Source: BOA, *T. OMI. 1693/42.*

Table 23: Tax evasion in Mentеше çiftlikleri, 13 March 1877-11 March 1892.

Name of the çiftlik	Percentages of taxes from the sized forests	Percentage of due amount of tithe and stamp tax
Tuna Sekme	0.0	0.0
Kızıl Seki	0.0	0.0
Kara Yurtlak	19.0	45.7
Tuzabad	6.9	24.2
Köşk	0.0	0.0
Kazıklı	0.0	0.0
Asin	0.0	0.0
Yaşyer	19.0	62.0
Kerme-i cedid	10.4	42.3
Hisarönü Söğüd-i		
Kilyos	7.7	18.4
Hamidköy	12.2	28.9
Köyceğiz	16.3	61.8
Dalyan with		
Teparası	97.5	0.0
Merkez	3.7	29.5
Okçılar	62.5	0.0
Eskere	0.0	80.1
Kargı	0.0	0.0
Yenef	0.0	0.0
Tuyarlar		
Kızılyurd with		
Bördünce		
Akçe Taş		
Söğüd		
Koca	20.1	79.9
TOTAL	12.4	41.3

Source: after BOA, *T. OMI. 1693/42.*

Table 24: Percentage of seized exports of forest products.

Name of the çiftlik	Effectual	Seized	% of seized	Effectual	Seized	% of seized	Effectual	Seized	% of seized	Effectual	Seized	% of seized	Effectual	Seized	% of seized
	Timber		to total	Basket rod		to total	Pine bark		to total	Charcoal		to total	Firewood		to total
	cubic meters			thousands			tonnes			tonnes			tonnes		
Tuna Sekme	6110.360		0												
Kızıl Seki	732.417		0												
Kara Yurtlak	2989.750	1606	34.9				1564.4	840.3	34.9	1023.6	540	34.5	1284	690	35.0
Tuzabad	938.035	100	9.6				2259.55	225.9	9.1	261.3	26.1	9.1			
Köşk										708.6		0.0			
Kazıklı	237.730		0.0	15		0	818.5		0.0	5686.15		0.0	16223.5		0.0
Asin	811.409		0.0	20		0	250.2		0.0	3589.15		0.0	16011		0.0
Yaşyer	10.045	15.045	60.0	107	107	50				215.5	215.5	50.0	3407	3407	50.0
Kerme-i cedid	340.390	75	18.1				875.3	193.2	18.1	11.25	0.025	0.2			
Hisarönü Söğüd-i															
Kilyos	3857.126		0.0	852.5		0	1877.6		0.0	982.4	423.9	30.1	21508	9282	30.1
Hamidköy	4152.980	864	17.2	120	25	17.2	2235.05	464.9	17.2	179.2	37.3	17.2	56759	11807	17.2
Köyceğiz	708.833	453	39.0	559.6	416.725	42.7	498.25	371	42.7	301.3	224.4	42.7	17387	12947	42.7
Dalyan with															
Tepearası	15.090		0.0				13.75		0.0				296.5		0.0
Merkez	8677.615	1504	14.8	130	22.533	14.8	2266.4	392.8	14.8	2465.15	600.6	19.6	61563.5	10670	14.8
Okular	6576.461		0.0	50		0.0	976.9		0.0	235.6		0.0	7215.5		0.0
Eskere	18681.213	18681	50.0				1036.1	1036.1	50.0						
Kargı	630.864		0.0	11		0.0	2885.25		0.0	307.7		0.0	13615		0.0
Yenef	530.306		0.0				134		0.0						
Tuyarlar															
Kızılyurd with															
Bördünce															
Akçe Taş															
Söğüd															
Koca		90	100.0					421.3	100.0		45	100.0		1988	100.0
TOTAL	56000.624	23388.045	29.5	1865.1	571.258	23.4	17691.25	3945.5	18.2	15966.9	2112.825	11.7	215270	50791	19.1

Source: after BOA, *T. OMI. 1693/42* (21 Ra 1310/13 October 1892).

Table 21 shows that Kara Yurtlak, Yaşyer, Hisarönü Söğüd-i Kilyos, Köyceğiz, Eskere, Yenef, Koca seized more than 20 percent of total forest area. Most important seizure was occurred in Eskere, which owned approximately the 30 percent of the total forest area in the region (91.9 percent of the total). Hamidköy owned 27.5 percent of the effectual total forest area, whereas Eskere owned only about four percent. Eskere escaped the supervision of the Forest Administration at the beginning.

According to calculations in Table 23, one can say that Yaşyer, Eskere, and Köyceğiz had the highest percentage of export of seized forest products, whereas Yaşyer and Eskere and, to a certain extent, Kara Yurtlak and Köyceğiz professionalized in timber trade. On the other hand, Yaşyer and Köyceğiz had the highest percentage of basket rod exports. Mostly Eskere, Köyceğiz, and Kara Yurtlak sold pine bark. The latter two as well as Yaşyer also exported the highest amount of charcoal and firewood.

As seen from Table 22, 12.4 percent of the total tithes collected came from the seized forests, whereas 41.3 percent was actually due in the region. Among such *çiftlik*s, Dalyan paid nearly all the tax obligations from the seized forests and Okçılar, did so as well to a certain extent. On the other hand, Eskere (which had 91.9 percent of its forest seized) did not pay anything. Hisarönü paid only the stamp taxes (30.1 percent of its forests was seized). It is obvious that Eskere showed direct resistance to the forest administration in terms of both the seizure and taxes. 15.8 percent of the total stamp taxes collected in the region consisted of those collected from the seized forests. Among the *çiftlik*s, with seized forest area, Kara Yurtlak, Yaşyer, Hisarönü, Köyceğiz paid more than 30 percent of the total stamp tax from the seized forests. The highest amount was due from Yaşyer and Köyceğiz, making up more than 60 percent of the total.

Among these *çiftlik*s, the government in 1891 bought Eskere. Originally, it was belonged to the pious foundation of Valide Sultan.⁷⁶⁹ On 13 April 1904, the government also decided to purchase another *çiftlik* in the neighborhood of Eskere, namely Elçi, for annexing it to Eskere.⁷⁷⁰

In other provinces of the Empire, similar trends can be discernible as well. Big landowners, villages and communities raised many complaints against as well as demands for usufruct from the state forests, even after a special Instruction was issued that regulated the issue of title deeds to forest lands. However, the government could not control the granting of them by the local registry officials.

On 14 October 1893, the Grand Vizierate sent an imperial decree to local provinces, which banned the issue of title deeds for *miri* forest lands to private individuals.⁷⁷¹ One month later, the ministry of forests, mines, and agriculture affirmed this order by sending an official note to the local forest officials.⁷⁷² This note was mainly aimed at warning forest officials on the illegal granting of titles by the local land registry officials. Nevertheless, such grantings did not stop. The ministry, then, sent another dispatch, on 25 June 1901, reasserting the aforementioned order of the government.⁷⁷³

The local land registry officials gave titles to forests lands for grafting wild olive trees. Such kinds of misdeeds increased the tension between the Forest Administration and the Land Registry (*Defter-i Hakani*). Finally, in April 1896, the government banned this practice and the Ministry of Forests, Mines, and Agriculture informed the local forest officials on 13 April 1896 that it was

⁷⁶⁹ BOA, Y. PRK. A. 7/2 (8 Ra 1309/12 October 1891).

⁷⁷⁰ BOA, Y. PRK. BŞK. 72/22 (27 M 1322/13 April 1904).

⁷⁷¹ *Muharrerat-ı Umumiyye*, no. 135, 2 Ta 1309/14 October 1893.

⁷⁷² *Ibid.*, no. 83, 3 T 1309/15 October 1893.

⁷⁷³ *Ibid.*, no. 31, 12 Haziran 1317/25 June 1901.

forbidden to give titles to any forest lands for grafting or for any other reason.⁷⁷⁴ The next year, another dispatch was sent to the local administrations. On 14 January 1897, the Ministry informed the local forest officials on the circular (*ta'mim*) of Land Registry, which ordered the local land registrars that they were not allowed to give titles to forests and also to winter and summer pastures on the grounds that the titleholders were paying the necessary taxes.⁷⁷⁵ The local land registrars was to mutually communicate the handover of lands in the neighborhood of forests with the local forest inspectors in order to make sure that there would be no danger to the well-being of forests.⁷⁷⁶

The forest administration relied on documents and registers of the individual *vakıfs* to segregate and demarcate forests attached to them.⁷⁷⁷ As conflicts on forest lands multiplied, the Council of State decided that the burden of proof for claiming possession over groves and coppices (*korular ve baltalıklar*) before the courts rested with the claimants and not the forest administration.⁷⁷⁸ Until the examination of the titles claiming possession to forests was complete, the local officials were not to allow claimants to cut timber or remove other produce (from forests under scrutiny) without the payment of the legal taxes. But these taxes were refundable after the court decisions came out in favor of claimants.⁷⁷⁹

⁷⁷⁴ Ibid., no. 14, 1 Nisan 1312/13 April 1896.

⁷⁷⁵ Ibid., no. 62, 2 Kanun-i sani 1312/14 January 1897.

⁷⁷⁶ Ibid., no. 63, 30 Teşrin-i evvel 1313/11 November 1897.

⁷⁷⁷ Ibid., no. 22, 25 Ağustos 1300/6 September 1884.

⁷⁷⁸ Ibid., no. 60, 3 Şubat 1303/15 February 1888.

⁷⁷⁹ Ibid., no. 1, 14 Mart 1304/26 March 1888.

5.9.1. A Case Study: Forests in Havran

This general assessment of the complexities of the Ottoman forest administration in this period might be better understood by looking closely at a specific case.⁷⁸⁰ The case I would like to consider is one where local interests clashed directly with the Forest Administration. The case is particularly interesting as it reveals: 1) how rules and regulations that appear to set down general principles have far more complex and irregular manifestations in reality, especially as different actors thread their own way through them 2) how scientific forestry was attempted to be applied in localities and the multiple resistances it encountered.

Before going into the details of the case, it might be appropriate to quote a high level official in the Ministry of Forestry, who said in 1902:

[O]ur whole problem arises from the fact that there is no overall cadastre of the land. To obtain one would be too costly, and anyhow, we do not have the skilled personnel to do it.... We only know of what is happening on the ground when and if a conflict outbreaks.

Our case exemplifies precisely this situation. The forest administration became involved in this case as a state institution, acting to implement promulgated rules and regulations and attempting to resist and counter local forces already in action. The case is set in the Simem el-Keferan village, in the kaza of Aclun (present day northern Jordan), in the livas of Havran, in the province of Syria. We have in our hands a series of communications pertaining to a dispute that arises out of what initially appears as a petty request. The son of Bedirhan Paşa, Zübeyir Bey, acting on behalf of the inheritors of the son of Izzeddin Paşa Tahir Bey,⁷⁸¹ applied

⁷⁸⁰ BOA, *T. OMI. 1694/13* (13 Ş 1324/30 November 1906). Unless otherwise stated, all the quotations from here to the end of the case are from this source.

⁷⁸¹ Bedirhan Paşa (last ruler of Botan principality in southeast Anatolia until 1846-47) was the uncle of Izzeddin Paşa. According to *Sicill-i Osmani*, Bedirhan's ancestry went back to Halid b. Velid. In 1217 (1802/3), he inherited his family estate (*yurtluk*) upon his father's death. He was deported to Istanbul in 1848 and exiled in Crete as a governmental official. He returned to Damascus about ten years

to the Havran forest inspectorship for a permit to produce charcoal from the shrubs on their land, as stipulated by the Forest Regulation. We do not know whether the permit that Tahir Bey requests pertains to the production of charcoal for sale or for their own use. However, charcoal is rare in the region and it would fetch a high price if marketed. Either way, the request appears to be favorable and even profitable for both Zübeyir Bey and the state, as the clearance of the shrubs would not only have made the land cultivable but it would have also generated additional revenue if the charcoal were to be sold in the market. Nevertheless, the involvement of the forest administration in the matter led to a series of complications.

The forest inspector objected to Zübeyir Bey's petition. He claimed that shrubs were not in private possession, but on a *miri* forest, and appealed to the governor of Havran to survey the land under consideration. Both his objection and appeal rested on the 1876 Instruction, which stipulated for the establishment of commissions to investigate the usufruct rights of forests.⁷⁸² The instructions recognized the exclusivity of the usufruct rights of forest title deeds given prior to the 1870 Forest Regulation on the condition that they were of the size and within the boundaries stated on the title deed. For all other cases, it sought to override the title deeds in favor of establishing state property status over forests. Nonetheless, the governor of Havran convened a Title-deed Investigation Commission (*Tedkik-i Senedat Komisyonu*) in accordance with the 1st article of this 1876 Instruction. The commission first checked the registers in the local registry and, after inspecting the

later and died there in 1284 (1867/68). It is said that he had 95 children, of which 22 sons and 21 daughters were living when he died. His nephew, Izzeddin, was exiled to Rumelia from Mardin in 1271 (1854/5). After a short residence there, he entitled as mirmiran and appointed to Yanya. He died during the last years of Abdulaziz (1861-76). Also see: Martin van Bruinessen, *Agha, Shaikh, and State: The Social and Political Structures of Kurdistan* (London: Atlantic Highlands and N.J.: Zed Books: 1992).

⁷⁸² “Ormanların Tasarrufuna Müte’allik Müeddiyatı Tetkik İçin Teşekkül Edecek Komisyonların Muamelatı Hakkında 6 Maddelik Talimat [Instructions Respecting Titles to Forests].” *Takvim-i Vakayi*, no. 1839, 9 N 1293/28 September 1876.

disputed land, issued a report on 6 November 1899, which stated that the disputed land was divided into three parcels. The first parcel had only a few naturally growing non-fruit trees. The second one was an olive grove and the third parcel was *cibal-i mubaha*, filled with naturally growth trees and without any land to cultivate. *Cibal-i mubaha* was the critical category as the Article 104 of the Land Code specified that such lands could never be entitled as *mülk* (freehold).

However, the agent of the claimants protested against this report and appealed to the Administrative Council of Syria (*Meclis-i İdare-i Vilayet*). The governor of Syria sent a memorandum to the administrative council of the liva of Havran, asking them to assemble a committee, consisting of local governmental officials and local experts, who would be assisted by a forest official, in order to settle the boundaries of the contested parcels, on December 2, 1899. The Havran council, then, ordered the Aclun administrative council to assemble one. The council elected two of its members in addition to the assistant director of the finance office, the secretary of the land registry and the secretary of the municipality, who used to work as a surveyor. Aclun Administrative Council informed the governor that the committee was arranged for investigating the validity of the title deeds and the objections of the forest inspector on January 4, 1900. The survey lasted four days. The committee reported that in accordance with the registers in the land registry office, the disputed land was divided into three parcels: Cebil, Meydan, and Keferliha. Cebil and Meydan were under cultivation and there were olive trees and a few oaks. The committee claimed that there were no *miri* forests within these parcels. But the Keferliha parcel was filled with of oak trees with some scattered cultivated plots within. But they added that many portions of this parcel were stony and unfit for cultivation, and hills and dales were covered with oaks. But most importantly they said that a special technical committee needed to be assembled to demarcate and measure the size of the *miri* forest, since the land belonging to the villagers and the forest were neither demarcated separately nor measured and there

were no fixed marks or borderstones. Furthermore, they reported that the local land registrar recorded this Keferliha parcel as arable. Finally, they reported that the document containing the findings of the previously conducted investigations also registered these three parcels in the name of Zübeyir. As such, the committee seems to have given a rather objective account of the situation in the locality, where they were faced with a large oak forest registered locally as arable land.

Havran administrative council transmitted this dispatch to the Havran land registry office on 19 February 1900, asking the actual situation of these parcels. Six days later, an official from the land registry replied that in 1885, a title deed was given for the entire land of Dibeyn village in the same district so that there was not an inch of land not possessed by the inhabitants of that village. He also emphasized the contradiction that the land official was designating the same land as a ‘field’, while the forest official, on the contrary, was labeling it a ‘forest’. Under these circumstances, the land official could not decide what to do about Simem el-Keferan village and agreed with the decision on calling up a special technical committee.⁷⁸³

On June 5, 1900, Ali Rıza Bey, the forest inspector of transactions currently in Damascus, sent another dispatch to the provincial administrative council. This dispatch is of particular interest as it reveals the perspective and the outlook of a central forest administration official. Ali Rıza begins his dispatch by giving his own assessment of the situation. To him, the situation is very clear:

[W]hile the matter initially seemed like a petty affair, the communications, inventories, and investigations carried out in the aftermath of the forest inspector's objection revealed an hidden agenda of unlawful appropriation, possession and destruction of an extremely precious *miri* forest of sixty to seventy thousand *dönüms* by cutting and burning it.⁷⁸⁴

⁷⁸³ Supplement 9, note 2.

⁷⁸⁴ Supplement 17.

Ali Rıza then proceeded to a detailed discussion of the case and of the course of action that he considered appropriate to be taken in accordance with the existing rules and regulations. First, he declared that the title deed in Zübeyir's hand was to be declared invalid according to the article 104 of the Land Code. Second, he argued that the said title deed also distorted the actual size of the land, which he considered to be an criminal act that depraved the rights of the treasury:

[W]hile both the Land Code and the Civil Code take boundaries rather than *dönüms* into account in matters of possession and since it is impossible for a title registrar to be ignorant of this, the fact that the aforesaid title registrar had given a title deed for ten thousand *dönüms* field and olive grove for a forest of sixty to seventy thousand *dönüms*. This can only mean that he put wrong in the place of right and modified the heart of the matter and committed a crime by depraving the rights of the treasury. It was wrong that the land within the boundaries was a field of the size of only ten thousand *dönüms*.

Ali Rıza Efendi's objections to the title deed and criticism of the local registrar did not end there either. His third remark was as follows:

[E]ven though a man is allowed to unite the deeds of his separate small fields and to have them recorded in a single deed if and only if there are no fields belonging to somebody else or no fields belonging to *miri* or *miri* forests in between these separate fields. When there are such fields or forests in between, the code requires the possessor to have a separate title deed for each of his own fields. The fact that the title registrar issued a title deed in the name of an individual person, pertaining to a village boundary that includes the fields of many other villagers, does not comply with the provisions of regulations.

Ali Rıza continued his criticism of the local registrar for giving title deeds 'at once' without considering the nature of land in question in his fourth remark. From Ali Rıza's perspective, the registrar could claim no ignorance of the rules and regulations and the various categorizations of land in the Ottoman state, so his actions constituted a criminal act. While those rules and regulations conceived the local title-registrar as an agent of the central administration, it appeared that he is in fact a member of a local power networks into which the central administration was not yet able to penetrate. In the fifth remark, Ali Rıza stated that the title deed in

question had been issued in the first place through such corrupt local relations. The inheritors represented by Zübeyir Efendi were inheritors of Tahir Bey, who used to be the governor (*kaymakam*) of Aclun district. According to Ali Rıza, this was a clear indication that the previously mentioned deed had been acquired ‘unlawfully and forcefully’ that necessitated its immediate nullification.

While Ali Rıza had challenged the legitimacy of the title deed up to this point, in the remaining two points of his dispatch he argued for the protection of the land in question in its entirety as a forest, which reflected his outlook as a scientific forester. In point six, he referred to the report of the title deed investigation commission. Ali Rıza disagreed with the description of the first location that the report said to have only a few naturally growing non-fruit trees. Even though this report had supported Ali Rıza’s challenge of the title deed, he suggested that this first section could be opened to agriculture, while “it is evident that even few natural trees would lead to more if they are protected, and if the land is not to be cultivated, they would lead to a most beautiful forest.” As such, Ali Rıza seemed to be not only a obliged state official but a devoted scientific forester and conservationist, who dedicated himself to present tricks of the trade. What kind of an scientific and conservationist outlook did his remarks imply? The answer can be discerned from the last point he made, which began first by briefly summarizing the case. He first summarized the content of the 1876 Instruction and concluded that the title deed in hand was not only a new one, given contrary to the Instruction that no new forest title deeds were to be given, its *dönüm* size was also not appropriate and furthermore it was a fraud for it was given as a title deed for arable land. Ali Rıza gives his opinion of such encroachments on forest land as he had witnessed in this case:

[I]t is desired to cut and burn these large *miri* forests, which not only bring a few hundred liras of yearly revenue to the treasury, but also supply the fuel wood needs of the people and beautify nature together with permanent inhabitants of villages and towns and clean the air and river

resources. But desire of a few *guruş* of profit would lead these forests to become a desert.

Nonetheless, he was certain that this counterfeit title deed would be revoked. He also thought that the officials in fault would be punished accordingly. Furthermore, he seemed to negotiate his earlier suggestion that the land in question be registered as a forest in its entirety. He says that

[A]s it is reported that there are also arable land and olive groves in the mentioned parcels, if it was deemed necessary to determine the real situation through a technical investigation and since the only scientific official in the vilayet is the forest inspector and since it is evident that an investigation conducted by forest guards could not suffice as a point of reference, the aforementioned forests and if there is any, the agricultural land and olive grove, should be investigated by [forest] inspector in the presence of the interested parties and their sizes should be measured and their boundaries should be marked and moreover a perfect map should be drawn up.

Interesting to note is the fact that Ali Rıza made no mention as to how the expenses of such an investigation would have been accomplished. Nevertheless, Ali Rıza's proposal was approved by the provincial administrative council. The council relegated the task to a special commission, consisting of a member of the council, the Havran public works engineer Zafraki, the *vilayet* land registry official Sabit Efendi and the *vilayet* forest inspector Hüseyin Hüsni. It also stipulated for a stipend for all these four members of the commission to be paid for by the agent of inheritors. However, the forest inspector was not to be paid as such, for his expenses were to be met by the forest administration. Lastly, the local security officials were to be ordered by telegram to not allow Zübeyir or any of his men to cut or burn any trees on the disputed land. The provincial council, thus, considered the concerns of the Forest Administration expressed in Ali Rıza's dispatch.

However, the actual course of events did not match the expectations of Ali Rıza. The first complication arose of the payment of the stipulated fees. The deputy governor of Syria asked Ali Rıza Bey what to do as Zübeyir Bey refused to pay the stipend for Cibran Efendi, the member of the Vilayet Administrative Council, who

was to join the commission. Furthermore, the forest inspectorship stated that they did not have the budget to pay the daily wage of the officials to be sent to the investigation of such a forest case and added that it would be impossible to pay in advance such a money from the forest revenue even if it was to be later paid back by the losing party. Ali Rıza replied that since it was Zübeyr who pretended to possess approximately sixty thousand *dönüms* of *miri* forests in the name of eleven thousand *dönüm* of field with an title deed acquired in a manner contrary to law, he should be the one to pay in advance the expenses of the commission, simply because he was to prove his ownership. He further stated that the forests belong to the state, thus the ministry of forests, mines and agriculture was in possession of them on behalf of the state. He added that if Zübeyir refused to pay, that meant he was abandoning his claim to ownership.

Cibran Efendi eventually did not join the final committee. The committee completed its mission, but sent back three reports instead of one. The first report, prepared by Sabit Efendi and Zafraki together and dated 25 September 1901 went as follows: Of these three locations, the Cebil and Meydan have a few oak trees and plenty of olive cloves. The Keferliha location, where a forest is claimed to exist, is under cultivation and there are olive and oak trees within and without the area under cultivation. Only the stony areas unsuitable for cultivation and distributed irregularly, have oak trees on them. The location is surrounded in its limits with cultivated land without any trees on it. Nonetheless, either within the said location or around its immediate surroundings, no large forest as claimed by the previous inspector could be seen:

[T]he trees on the stony ground could not be called forests, but even if they were assumed as being forests, considering the fact that they are not situated within a boundary or at a certain corner or direction, that they have been possessed for seventeen to eighteen years with an imperial deed (*sened-i hakani*) and that it would be unlawful to revoke one without an imperial order, making a differentiation was not deemed appropriate.

It is clear from this document that these two members of the committee saw the case in terms quite different than Ali Rıza. In their view, the question is not the legitimacy of the title deed or a true assessment of the nature of the land in dispute, but rather whether or not the forest administration is justified in its claim that all land in this region was forest land.

The second report dated 28 September was written by Zafraki alone. Zafraki begins his report by recognizing the difficulty of demarcation and measurement of “the locations where the three parcels of land and forest they encompass are situated.” Thereafter, Zafraki explains why he could not draw up a map even though he had been charged with the task. After mentioning the considerable cost of the necessary labor, he goes on to say that the orders issued to the other members of the commission, as well as the telegram he received on location on September 11, did not mention to draw a map, and that the other members of the commission said that it would be unnecessary. Zübeyir Bey had not agreed to pay the expenses anyhow.

The last report, dated 14 October 1901, is written by Hüseyin Hüsni, the forest inspector of the Syria province. Hüseyin Hüsni states the objective of the mission as:

[T]he measurement and mapping of the locations in possession of the inheritors to differentiate from one another the *miri* forests and the entitled land so that both imperial law and law of inheritance are protected and saved from violation.

These objectives of Hüseyin Hüsni seem to have encountered fierce resistance from Zübeyir who, “let alone the measurement of land or its mapping, opposed in a thousand ways even the investigation and proper determination of its boundaries.” Yet Hüseyin Hüsni, as an official of the forest administration, certainly had more to add. He reports that

[a] greater part of the Keferliha forests was destroyed and small fields were created, as the agent Zübeyir Bey had long been violating the forest and cutting plenty of trees every year to produce charcoal.

Hüseyin Hüsni, nonetheless, gave his own estimation of the size and the ownership and usufruct status of the land in question. His investigation revealed “the Simem el-keferan area is approximately larger than sixty thousand *dönüms*, and Zübeyr Bey and the inhabitants of the village own merely ten thousand *dönüms* of this land. With this taken as a hundred share (*sehm*), forty-three of these were possessed by the inheritors and fifty-seven by the peasants. According to Hüseyin Hüsni, the inheritors not only had no right to claim usufruct rights over the large forest, but the deeds in their hands were untruthful as they are registered as fields and olive grove.

These three reports prepared by this commission were then discussed and evaluated in the Provincial Administrative Council, where Hüseyin Hüsni was also present and the forest administration was notified of the decisions with a dispatch dated 1 December 1901. The Council seemed to have agreed with Hüseyin Hüsni’s report as to the present ownership and usufruct rights existing in these three parcels: “the inheritors and villagers use the aforementioned parcels in common (*müşa’en*) and in monthly rotation with a deed.”⁷⁸⁵ However, as to the forest status of the large portions of this area, they seemed to hold a different view:

[T]hat the areas containing oak trees within the Keferliha parcel are also within the boundaries of this usufruct deeds is reported both by learned men and expressed verbally by the inspector in the council meeting.

While Ali Rıza had argued for the nullification of the title deed and the protection of the whole area as forest, the Council however chose to follow quite a more pragmatic way, basing its decision on the article 4 of the 1876 Instructions. According to this article, in such cases, the trees in forests within the boundaries of deeds previously given in the name of grazing land, meadow or field would be

⁷⁸⁵ For a discussion of the term *musha’* as it was practiced in the villages of Havran, see: Birgit Schaebler, “Practicing *Musha’*: Common Lands and the Common Good in Southern Syria under the Ottomans and the French,” in *New Perspectives on Property and Land in the Middle East*, ed. Roger Owen (Cambridge, Mass. and London: Harvard University Press, 2000).

assumed as non-existent, with the assumption that all of the land were fields. The amount of yield and the tax revenue to be generated from this yield would be investigated, and depending on the *dönüm* size of the aforementioned grove and forests, a forest tax (*orman resmi*) would be assigned. The regulation left it upon prudence of the authorities whether new titles would be issued. The trees of such forests should not be cut and transported until this forest tax is assigned, even by the users of the meadows and grazing grounds, but would be protected in accordance with the forest regulation. The administrative council then confronted the forest administration:

[w]hen the stipulations of this Instruction is so clear, it is an occasion to reflect that the provincial forest administration had chosen to remain silent for over seventeen to eighteen years, and its special commission did not investigate and reach a decision pertaining to these parcels, which the inheritors and inhabitants with title deeds intend to rightfully make use of, and now wish to pursue the course of canceling the usufruct deed without a legal decision.

The Council then affirmed the title deed and reminded all parties that a deed pertaining to the usufruct rights of immovable property was to be declared void only if a decision to that effect was obtained from a court according to the Ministry of Interior's decree (no. 137), dated 18 November 1897. Thus, it invited the Forest Administration to appeal to the appropriate court if it still had any objections to the title deed.

This decision of the *vilayet* administrative council was a serious blow to the Forest Administration. The internal communication within the ministry went as follows:

[A]ccording to Ali Rıza Efendi's memorandum, this title deed is all together invalid. This is the rule of law and order. The decision of the provincial administrative council is not above that and it is impossible to accept this decision, as it would constitute a precedent and turn the rights of the imperial treasury upside down. This decision was taken with the pressure of the district governor, [Tahir Bey]. Therefore, the local forest administration should make the aforementioned forest its own and not allow any encroachments. A reply should be written to the province asking them to understand that the other party should appeal to the court if

they wish to, and a copy of the title deed in question should be sent with a margin note.

As is illustrated, each social actor interpreted the rules for their own use at the expense of others. At first sight all these interpretations seem to be logical and practical. Each actor referred to the same article of the same regulation, but from different perspectives. At the same time, they sometimes defined the very same event by referring to different articles of different regulations. These phenomena suit Islamoğlu's claims on the nature of property rules and regulations, state practices of registration and recording that provided the ground for negotiating the definitions and orderings of these rules and regulations among different social actors.⁷⁸⁶

We do not know how the case was concluded. It necessitates further research. But I would like to make a speculation on the issue by giving another example from Kastamonu, a city in northwest Anatolia.

On 15 May 1902, the Minister of Forest, Mines and Agriculture, Selim Melhame Paşa, wrote a memorandum to the *Şura-yı Devlet*, stating that though it was definitely prohibited, the land registrars were giving title deeds to state forests by *hakk-ı karar* (prescriptive right) and by various plots. These officials were attached to the Ministry of Internal Affairs and he stated that he did not have any sanctions on them. Thus, he asked the Minister of Internal Affairs to stop such kind of illegal operations. Although, the Ministry of Internal Affairs issued a general statement to all provinces that forbade such kind of acts by the land registry officials, almost nothing could be done. A couple of days ago, Kastamonu head-inspector of forests reported that the local land registrar recorded four thousand *dönüms* of pine forest as an arable for one hundred fifty *guruş* to a certain Hüseyin by prescription. The Court of Appeals (*İstinaf Mahkemesi*) in Kastamonu recognized that the transaction was legal. Upon this warning by the head-inspector,

⁷⁸⁶ Islamoğlu, "Property as a Contested Domain."

Selim Melhame complained to the Council of State that they were struggling with the local courts to prevent such kind of approvals and warning the Imperial Registry to control its local officials. But, Selim Melhame was aware of the fact that if the Forest Regulation remained unaltered it would be impossible to stop this negative process.⁷⁸⁷ The major hindrance seemed to be the Article 18 of the *Emlak-ı Sırfa* Regulation of 9 September 1874, which stipulated that the deeds that were given as freehold would be considered official title deeds and would be recognized by courts and commissions throughout.⁷⁸⁸

5.9. Conclusion

Ottoman efforts to commercialize forestry especially after the 1860s were doomed, due foremost to physical obstacles, such as lack of roads, which made the export of forest products a costly endeavor. In most of the cases, the attempts to lower transaction and transportation costs proved to be beneficial mainly to the rich local timber merchants and contractors, and not so much to the central state and the local population.

The system of farming out the forests was practiced, especially to collect the tithe from forest products, if the forests were not reserved for the Imperial Shipyard and usufructed by villages and towns for subsistence needs. As was the case with agricultural products, revenues of certain forests were farmed out at public auctions and tendered to the highest bidder on the condition that the bidder fulfilled certain requirements, such as providing a solvent guarantor, or caution money. However, in due course of time, several frauds and corruption occurred in the application of this

⁷⁸⁷ BOA, ŞD. 531/22 (7 S 1320/15 May 1902).

⁷⁸⁸ “*Ber vech-i bala emlak için verilen senedler senedat-ı resmiyyeden olarak bilcümle mehakim ve mecalisde muteber ve mamulunbih olacaktır.*”

system. The development of scientific forest management created an opportunity for the government to surpass the deficiencies inherent in the system of tax farming, but it gave rise to other problems unwittingly.

Cadastral was central to the supervision of forests and to the decisive establishment of state claims over forests. However, lack of professional cadres and budgetary problems continuously hindered the state efforts to register forest lands as the preparation of cadastral was a very expensive undertaking.

The government relied on revenues expected from mine concessions. The aim was to develop forest income and hold cadastral using this revenue. However this plan also failed mostly due to the unsuccessful concessions and lack of the fuel necessary to work the mines in many localities.

In the process, forest lands were appropriated by private individuals whom the government could not control. The Forest Administration had to struggle with the land registry to prevent such transfers of forest lands. The granting of titles to private individuals carried the struggle between the Forest Administration and land grabbers from the field to the court. Briefly put, the Forest Administration could not prevent the individuals appropriating property rights in forest lands at the expense of the larger public, who had formerly common rights over resources.

CONCLUSION

State ownership of forests through claims of administrative authority and monopoly over extraction of resources was central to the trajectory of the Ottoman forestry history in the nineteenth and twentieth centuries. However, in its efforts to implement legal rules and principles, the forest administration was contested by other state institutions and local powerholders. The inconsistencies in the application of the rules and regulations concerning forest and agricultural land created certain vacuums in the exclusive claims of the state, which led to the appropriation of forest lands by private individuals, which became increasingly widespread after the 1880s.

The inherent limits and weaknesses of Ottoman modern statemaking, wrongly equated with ‘centralization’, had a direct impact on the development of forestry. Despite its limitations, the Ottoman state did implement modern forest management in the nineteenth century by adopting the global ideas of rational forestry, which aimed to maximize revenue from forests. However, due to geographical differences and the role of technology, the Ottoman case did not always conform to the standard continental models.

The history forestry in the Ottoman Empire is a rather exceptional case in the global history of scientific forestry developed in the eighteenth and nineteenth centuries. In the Ottoman case, *laissez-faire* capitalism was clearly not the dominant policy of exploitation of natural resources for a long time. Although mostly unsuccessful, the government always tried to control the exploitation of both private and public forests, with the exception of some mining enterprises. The

Ottoman state chose to modify existing internal forest taxation policies by adapting the French model as a basis for its imperial forestry policies overall.

Before the development of scientific forestry, the Ottoman state managed forests with the aim of satisfying financial and military needs. Even after the Tanzimat Edict, the central government issued imperial decrees mostly to regulate the supply of timber for the imperial shipyards, for public works, for military purposes, and for forest taxation. However, in the second half of the nineteenth century, the government designed new models to render forests more productive. In the aftermath of the Crimean War, with the assistance of European specialists the Ottomans designed a new program for administering not only forests, but all other natural resources as well, and for increasing agricultural productivity and establishing industrial enterprises. The Council of Public Works was therefore established as the institution responsible for decision making and planning towards this aim. The French forest experts were authorized to draft a special regulation and specifications to open up forests to competition. To realize these objectives, the government sought to transform the traditional ways in which local people managed natural resources.

Here, I have compared and contrasted ‘fiscal forestry’ and ‘scientific forestry’ in order to understand various conflicts, bargains, and concessions between different actors. However, the practice of ‘scientific forestry’ actually combines the fiscal concerns of the state mixed with a scientific approach to forest management, while the idea of protection had already been in use as part of pre-1860 ‘fiscal forestry.’ Since the government assessed and categorized forests, as well as other natural resources, as crucial sources of wealth for the imperial treasury, the main issue for the forest administration was to preserve existing forests in order to maximize the revenues of the treasury. The idea of ‘good conservation’ (*hüsn-i muhafaza*) was frequently mentioned in government documents whenever there was an encroachment upon the state’s forests. It should be noted, however, that the

Ottoman Empire met with no violent resistance against implementation of state control over forests in the nineteenth century, unlike some other countries such as France and India, where the introduction of scientific forestry was rather contested.

Scientific forest management in the Ottoman Empire continued to provide a sustainable supply of timber for the market and the Imperial Shipyard. The demand for timber, fuel wood, charcoal, tar, etc. increased so much during the Crimean War that the earlier supply became insufficient. Railway constructions further increased demand for timber. The concessions granted to the railway contractors as well as to the concessionaire of mines for the exploitation of the nearby timber resources probably alarmed the central government against uncontrolled cuttings. In addition to these public construction projects, the construction of the Suez Canal and the need for barrel staves from the Bosnian forests after the boom in the wine trade in southern France also contributed to overall demand.⁷⁸⁹ These developments and pressures constituted the basic factors forcing the Ottoman administration to strive towards more effective administration of its forests.

The concerns of the Ottoman government about scientific management echoed those of the French forest experts. French experts argued for the protection of Ottoman forests from degradation in order to maintain their benefits for the local people and the central treasury. To them, the main culprits of destruction appeared to be the traditional destructive mentality of local people and the inefficiency of commercial organizations and trade networks within the Ottoman state. It is during this period that we can see a clear increase in the number of documents regarding forest reclamations, firing, cattle grazing, illegal cuttings, and trade in forest commons.⁷⁹⁰ Be that as it may, arguments regarding such incidents put forth by the forest administration sometimes masked an ulterior motive. More often than not,

⁷⁸⁹ Bricogne, *Ormancılık Heyeti*, pp. 6-7.

⁷⁹⁰ Note that all of these factors may also stimulate the economy as well as population growth. Bloch, *French Rural History*, pp. 1-20.

claims regarding the shortage of forest products and destruction of forests by peasants and animals were devised by “professional foresters” to legitimize their demands to control and regulate forest lands at the expense of others.⁷⁹¹

French forest experts were in charge of the Empire's forests between 1857 and 1878. They laid the groundwork for early forest administration and organization. According to Bernard, they first took it upon themselves to categorize the issues and obligations requiring most immediate attention. The early organization of forest administration was twofold: (1) the forest inspectors, who would be responsible for dealing with the problems related to local judicial verdicts and decisions about forests and (2) the Bureau of the General Directorate, which would be responsible for dealing with the problems identified by the local inspectors. Bernard says that this was “a French system through and through.”⁷⁹²

During this period, French experts especially focused upon surveying European lands of the Empire because wood and timber from that region could be more easily marketed to Europe. At the same time, they surveyed many forest lands in Anatolia, although not nearly as thoroughly as they did in Europe. In short, French experts’ endeavor was limited to securing a sustainable income for the Ottoman state by seeking to protect its forests from destruction. To this end, they assisted the government during the codification of rules and regulations regulating property rights on forest lands. There were no reliable plans, sketches, maps, or title deeds of the forests in the 1860s, which made initial investigations and surveys extremely difficult for the French experts. Unfortunately, a map on the forests of Bosnia-Herzegovina was lost shortly after its arrival in Istanbul. Thus, the surveys of these experts as well as their written accounts, maps or sketches (if there were

⁷⁹¹ On problem of the shortage of forest resources in Europe, see: Grewe, “Shortage of Wood?”

⁷⁹² Bernard, *Türkiye Ormancılığının Mevzuatı*, p. 113.

any) are useful resources for discerning the anatomy of forests in the Empire at that time.

Prior to the 1860s, the state's forest related policies were shaped primarily by military and local demands as well as the provisioning of urban centers. From the 1860s onward, commercial exploitation and sustainable management became the dominant factors in Ottoman forestry. Forestry reforms, it should be noted, developed in conjunction with the deepening financial crisis. Discussions about how to alleviate the state's financial woes inevitably gave rise to questions about how best to exploit the Empire's natural resources, as well as its other revenue-generating sectors.

Though the Ottoman government sought to control commerce in forest products, especially at points of exchange, they proved largely unsuccessful due to lack of sufficient personnel. While local officials were supposed to control illegal cutting of trees in the state forests, they only managed to perform their duties at the markets, ports, and railway stations. More often than not, this practice in general led to abuse of authority.

The Forest Regulation subjected the cutting and culling of timber and collection of other forest products to felling licenses granted by forest officials, regardless of whether the forests were state or privately owned. However, this rule was occasionally violated. As a matter of fact, the Ottoman government had no effective protection policy, though due to factors beyond its control, the forests were ultimately less exploited than they would have been in a different environment. The obstacles to commercialization of Ottoman forestry were the lack of professional and technical experts, a road and waterway network system, and the lack of foreign investment due to difficulties caused by above obstacles and upper-level bureaucratic unwillingness. Only later did professional foresters, regarding the forest as national wealth (from an environmental point of view), begin to resist foreign encroachment.

It remains unclear whether peasants, the state, or merchants and contractors were the real agents of deforestation in the Ottoman Empire. Ever since the very first forest regulations, the Ottoman government came into constant conflict with merchants, contractors, and local powerholders, whenever it tried to keep these groups from exploiting forest resources. Although the state ownership of forest lands did impact the commercial interests of these groups, the latter managed to find new means of exploitation, which the state had difficulty controlling due to an insufficient number of forest officials and guards. Besides, those with commercial interests in the forests sometimes established alliances with bureaucratic cadres, at the expense of the peasants with whom they had formerly cooperated.

The effects of nineteenth century policies of colonization and deportation of nomadic and sedentary populations, as well as mass immigration, on the environment have been neglected by historical research. In the pre-industrial period, it was primarily the Imperial Shipyard that was concerned with the effects that these policies were having upon forests, even though, ironically enough, it was also the most important agent of deforestation throughout Ottoman history. On the other hand, the establishment of the Forest Administration and protection policies in the second half of the nineteenth century, which aimed to conserve the state's forest resources, radically transformed the Shipyard's self-supporting approach towards forest resources.

Conservation policies and the regulations which were intended to make those policies more effective redefined public property [or state property] at the expense of common property. According to the administrative mindset, the material benefits of public property belonged to the state, while the moral benefits derived therefrom belonged to the whole nation. However, this reformulation was contradictory to the existing social reality. According to the administration of the period, the exploitation of forest resources by the local people was based on selfish motives, while the protective measures of the state were characterized by universal and

altruistic objectives. To put it another way, while seeking new ways to exploit the potential natural sources of wealth in accordance with the idea of productivity, the Ottoman government simultaneously abstained from upsetting the existing social and economic order.

This dissertation on the Ottoman forest history emphasized the important turning points in the development of the relationship between the state, society, and forest utilization. An analysis of previous approaches to land use in general, and forest use in particular, is crucial to understanding the transformation that the Ottoman state underwent in the nineteenth century. The inadequacy of available secondary sources made a thorough comparative analytical study of the interaction between Ottoman society, culture, and economy and its environment impossible. It is nonetheless hoped that this attempt may be considered a beginning in this endeavor. I tried to demonstrate how forest administration and management shaped and transformed the Ottoman attitude towards its natural resources. I argue that issues about forestry played an important role in the administrative, economic, and financial practices of the second half of the nineteenth and the early twentieth centuries. The focus of a certain group of elite foresters upon forest issues was a main component of modern statemaking in the Ottoman Empire.

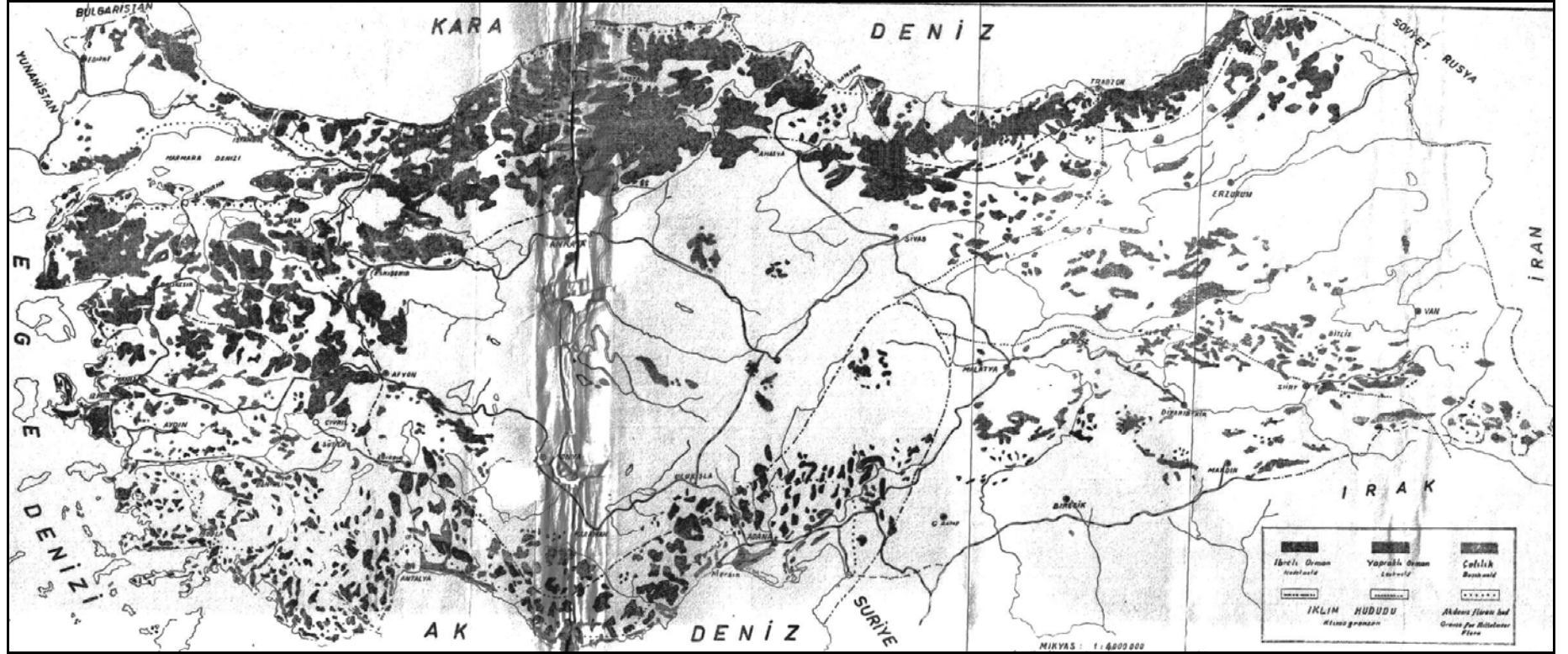
Despite its efforts, the Ottoman government failed to institute a truly effective forest administration. Specifically, it failed to prevent the accumulation of forest lands in private hands; to forestall the manipulation of forest rules and regulations; and to enforce the stipulations of the concessions and railway grants. The government's policy of tendering forest products for contract in the 1860s and 1870s did benefit commercial interests seeking to acquire forest concessions, at the expense of other claimants. In short, while the Ottoman state forestry could not resist the demands of private individuals, it also struggled to protect the communal rights of local people. However, merchants were able to evade the restrictions imposed by the state by establishing alliances with villagers, who possessed right of

usufruct on coppices. There were also informal agreements among merchants against the auctioning and tendering of forests by the government. They also resisted the Forest Regulation until the subsequent issuance of certain instructions concerning forest management.

Although the codifiers attempted to institute foolproof regulations intended to prevent the abuses and misuses encountered during implementation of previous measures, they only met with further misappropriation due to the gaps in the laws. This was partly due to contradictions between the objectives of revenue maximization and forest conservation. Moreover, the state never possessed sufficient information on actual local practices, forest wealth, transport facilities, etc., which could have made the codification of rules and regulations more efficient. Maybe the most successful aspect of Ottoman forestry was the internalization of scientific knowledge in the second half of the nineteenth century.

Contrary to critiques of Ottoman forestry policies, the Ottomans left modern Turkish forestry a wealth of knowledge and experience. After all, with the exception of the 5th article, which was repealed in 1924, the Forest Regulation of 1870 remained in force all the way up until 1937. Thus, a study of early Republican forestry would be useful for a better understanding of the transition from Ottoman to Turkish forestry.

FOREST MAP OF TURKEY, c. 1930s



Source: Yiğitoğlu, Ali Kemal. *Türkiye'de Ormancılığın Temelleri*.

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Cevdet Tasnifi

Cevdet Askeri

Cevdet Belediye

Cevdet İktisat

Dahiliye Nezareti

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APPENDIX 1

CONDITION, DISTRIBUTION, AND USE OF FOREST RESOURCES IN THE BALKANS

REGION	PHYSICAL FEATURES	CHARACTERISTICS	MAJOR TREE SPECIES	TYPES OF USE
Lower Bosnia	<ul style="list-style-type: none"> - Major mountain range is the Dinaric, or Bosnian Alps. - Floatable rivers, such as Sava, Vrbas, Una, Drina. - Argillaceous-calcareous soil was favorable for reforestation, especially for replanting of oak species. 	<ul style="list-style-type: none"> - Vast forests including scattered enclaves of meadows and marshes. - Monolithic and consistent forests, especially in the resinous mountain ranges. - Very proper for commercial exploitation, except for oaks due to smaller and irregular shapes being not suitable for industrial production and shipbuilding. 	<ul style="list-style-type: none"> - Oak predominated the region, mixed with the beech in some regions, in the east. In the west, there were the fir, which dominated the region in general, mixed with the birch, elm, beech, linden and hornbeam scattered. - Major oak species: the sessile oak (<i>Quercus petraea</i>), the pedunculate oak (common oak, or English oak, or <i>Quercus robur</i>), and to a certain degree the valonia oak (<i>Quercus macrolepis</i>). - Coniferous trees, such as laricio (Corsican) pine (<i>Pinus nigra</i> subsp. <i>laricio</i>), esp. in northern slopes of the Dinaric Alps. 	<ul style="list-style-type: none"> - Oak groves exploited more than other species, in particular for the production of the barrel staves. - Staves marketed in enormous quantities in Marseilles (as if originated from Trieste in Austria). - Construction timber from fir and pine, and firewood from beech and the hornbeam. - Slash-and-burn agriculture widespread - Browsing of pigs and cattle. - Excessive loggings by local populations.
Upper Bosnia		<ul style="list-style-type: none"> - Monolithic forests - Commercially less valuable than lower Bosnia - Forests located in the higher altitudes not suitable for exploitation due to underdeveloped transport system 		

REGION	PHYSICAL FEATURES	CHARACTERISTICS	MAJOR TREE SPECIES	TYPES OF USE
Herzegovina		<ul style="list-style-type: none"> - Monolithic forests in western slopes of the Dinaric Alps. - Suitable for exploitation due to easier transportation and less destruction. 		<ul style="list-style-type: none"> - Heavy consumption in iron forges/furnaces. - The extraction of wood and tar from coniferous trees.

REGION	PHYSICAL FEATURES	CHARACTERISTICS	MAJOR TREE SPECIES	TYPES OF USE
Danubian provinces	<ul style="list-style-type: none"> - The forests between the right-hand side of the Danube and the Balkan mountains were surveyed. - Affluents of the Danube were not floatable due to their torrential nature. - Calcareous soil for forest vegetation. 	<ul style="list-style-type: none"> - Not suitable for commercial exploitation due to the lack of transportation system and bad quality. - High rates of deforestation due to firewood extraction. - Forests of Sophia, Vidin, and Tirnova were in the mountainous part occupying the high passes, the plateaus and the summits of the Balkans. - Forests of Rusçuk, Tulchea, and Varna located near the Danube and the Black Sea coast. 	<ul style="list-style-type: none"> - The dominant species: the oak, especially the pedunculate oak and the red oak (<i>Quercus rubra</i>); then the ash, the elm, the maple, and the linden. In the higher altitudes, the beech, then the scots pine (<i>Pinus sylvestris</i>) and the fir tree. These species dominated the forests of Vidin and Sophia and the hills of Tirnova. - Very limited succession of intermediate ages between young pole plantations and old-growth forests. 	<ul style="list-style-type: none"> - Exploited mostly for local household consumption, building material, and small industries. - Export of firewood and timber to Wallachia. - Charcoal consumed in mass quantities by the iron mines of Samokov, the steam mills of Deliorman, and by factories in Tulchea and Varna. - Slash-and-burn agriculture. - Fire for regeneration of grasslands.

REGION	PHYSICAL FEATURES	CHARACTERISTICS	MAJOR TREE SPECIES	TYPES OF USE
Edirne (Aydos- Burgaz)	<ul style="list-style-type: none"> - Major mountain range is the Rhodopes. Affluents of the Maritza, except for the Kritchma during the seasons of flood, were all torrential and thus were not floatable. - The forests on the Black Sea were on a range of hills, average heights varying between 200 to 500 meters. - The argilo-siliceous, and calcareous base soil is rather rich in humus and appropriate for the vegetation of oak. 	<ul style="list-style-type: none"> - Forests distributed very irregularly - The major forests were situated on the right bank of upper Maritza and on the foothills of the Samakov range until approximately the mid-distance between Tatarpazarciğı and Plovdiv and on the Black Sea coast stretching from the Istranca mountains to the districts of Aydos and Burgaz. - Left bank of Maritza mostly consisted of bad coppices. - Forests suitable for commercial and regular exploitation, situated on the valleys and the northern ridges of the Rhodopes, namely the Belova and Batak forests. - There were numerous glades within almost all wooded areas. - The major part of the forests on the Istrancas belonged to the vakıfs. 	<ul style="list-style-type: none"> - The main species: the oak, the beech, the scots pine, the laricio pine (Corsican pine, or Pinus nigra subsp. laricio) and the spruce. There were also few hornbeams, ashes, maples and birchs, scattered among the other species. - The spruce, growing on high altitudes, was one of the largest and tallest among all species (circumferences ranging between 3.5 and 4.5 meters and the heights between 35 and 40 meters). - The scots pine and the laricio pine were the other large species. 	<ul style="list-style-type: none"> - Many sawmills on the affluents of Maritza, which chopped the trunks and boles, which arrived the sawmills either by throwing in ravines, kinds of natural slides (in local usage “atamak”), or by rolling along the slopes. - Extraction of resin and touchwood from resinous trees, mostly scots and laricio pines. - Trees usually squared on the mountaintops and were hauled by oxen on lousy paths to the bottom of the mountains. - Major forest produce, such as planks, traverses, beams and baulks hauled to the shores of the Maritza and transported by rafts, which were but cut up and sold where they gave up their cargo - Provided traverses for the Edirne railroad and firewood and charcoal to Istanbul.

REGION	PHYSICAL FEATURES	CHARACTERISTICS	MAJOR TREE SPECIES	TYPES OF USE
Edirne (Gallipoli- Tekirdađı)	- Major mountain ranges are the Istrancas and the Tekirdađı and the mountains of the Gallipoli peninsula, which extends parallel to the Marmara Sea.	- Small forests scattered on the mountains of Gallipoli and Tekirdađı. - Forests were not very important in terms of area and consistency and not suitable for commercial exploitation. - There were relicts of afforestation originally for [royal] hunting.	- Principal species were the oak, the pine, and the Aleppo pine, especially in the Gallipoli peninsula.	- Supply local consumption and the railroad between Enez and Edirne. - Widespread barking of pine trees for tannery. - Mostly merchants from İstanbul engaged with trade in almost every kind of forest produce.
Thessaloniki	- Major mountains are the Rhodopes and the Cassandra and the Pirin and Serbin mountains in the sancak of Serez; and the mountains of Ploshka, and Raslouk on the left bank of the Karasu (Struma/Strymon), all having beautiful and solid forests.	- Mountains were covered with vast forests, but were distributed unevenly. - Vast coppices of holm oak and chestnut and a few groves between Thessaloniki and Serez.	- Major species were: the oak, the fir, the chestnut, and a couple of pine species. - In the peninsula of Chalkidicia (Halkidikya), there were 40000 hectares of hardwood forests, mostly oaks, on the Kesendire (Cassandra) mountain. - Well-protected oaks and chestnuts on the Mount Athos, which belonged to the Greek Orthodox monastery.	

REGION	PHYSICAL FEATURES	CHARACTERISTICS	MAJOR TREE SPECIES	TYPES OF USE
Janina (incl. Thessalia and Macedonia)	<ul style="list-style-type: none"> - Extending parallel to the Aegean sea, there were forests, in some parts disturbed with underwood, on the mountain chains starting from the Pelion and Ossa, and reaching up to the Olympos in the district of Triccala. - Argilo-siliceous soil of Olympos. 	<ul style="list-style-type: none"> - Forests, in general, suffered very much from the exploitations due to the closeness of the sea and the facilities of transportation. - Mountains of Agrapha and Metzovo, in Janina, were richly wooded than the forests of the coastal areas. - Transportation of timber on the Salembria river was quite difficult, especially after Larissa, thus the forests resources in these regions were relatively preserved from degradations. 	<ul style="list-style-type: none"> - Dominant species were the fir and the laricio pine as well as the oak, the beech and the chestnut in Ossa. - The beech covered the sides of Pelion, but there were also some old-growth oaks. - The beech, the scots pine and the fir tree formed the vegetation of the tops of these mountains. - On the lower elevations closer to the sea there were holm oak, and coppices mixed with the Judas tree - Pines and oaks, which were 2 to 3 meters of girth, dominated Agrapha and Metzovo mountains. 	<ul style="list-style-type: none"> - Holm oak, Judas tree and coppices exploited specifically for obtaining firewood. - Forests in Macedonia and Thessaly exploited for commerce and for naval demands of the Thessaloniki shipyard. - Major items of trade were firewood and charcoal. -The biggest consumer of these forests was the railway company, <i>Chemins de fers Orientaux</i>, owned by Baron de Hirsch.

Source: Bricogne, "Les fôrets de l'empire Ottoman."

APPENDIX 2

FINES AND PENALTIES IN THE FOREST BILL OF 1861

Any person, who failed to observe the rules and regulations or did not conform to the stipulations of licenses and contracts, was deemed to be guilty of an offence and thus forced to comply with the payment of fines or imprisonment stated in the Bill of 1861. The articles of the Bill concerning the rules against forest offenses are as follows:

In the article 39, the illegality of felling and removing trees from a state forest, even for domestic use, without a license was restated. The fines for felling and removing timber from such forests in contrary to official rules and regulations were as follows:

Table 1: Fines for illegal cutting and removing trees from state forests.

Girth (cm)	Girth measured above the ground (\approx m)	Fine per tree (5 guruş, or beşlik)	Per bundle or a human load (5-piastres)	Per load of pack animals (5-piastres)
below 12	-	-	2	4
12-24	1.5	8	-	-
24-36	1.5	15	-	-
above 36	1.5	20	-	-

If the length from the ground was lower than 1.5 meters, the girth was to be measured from the place where the tree was cut off. If the tree in question was one of an oak species, these fines were doubled. Stripping the barks of a tree or giving harm in other ways would be fined as if the tree were cut off about 38 centimeters (1 *kadem*) above the ground, thus the girth was to be measured from there (Article 40). Moreover, if the person did not obtain a receipt from the forest guard, as stated in the provisions of Article 29, and could not prove that the arrested trees were not felled and removed from a state forest, s/he would be punished in accordance with the fines mentioned in Table 1 (Article 41). The same fines would also be applied

to licensed fellings, which began before the allowed time and without the presence of the forest guards. If the offenders could not be found, the contractors, dealers, or merchants were to pay the necessary fines instead of them (Articles 44 and 45). If the undertakers of contracts made excess fellings other than the permitted amount, the fines in the Article 39 would be doubled and this excess trees were confiscated as well as the offenders would be forced to recover the damages (Article 46). For other committed offenses that were not included in the provisions of this Bill, the Forest Administration did have a right to demand compensation for the damages and an extra fine between 10 *beşliks* (50 *guruş*) and 20 *beşliks* (100 *guruş*) (Article 48).

According to Article 42, extracting, collecting, and removing stones, earth, minerals, dry and fresh leaves, seeds and other forest produce without a license was a guilty of an offence. The penalty of this offence was five *beşliks* (25 *guruş*) for each animal load and two *beşliks* (10 *guruş*) for each human load.

Browsing on prohibited forest tracts was another offense. (Articles 50 and 51). The fines were as follows:

Table 2: Fines for browsing animals in prohibited forests tracts.

	<i>Fine per animal (guruş)</i>	<i>Number of animals between 1-20 (head)</i>	<i>Number of animals between 21-40 (head)</i>	<i>Number of animals between 41-60 (head)</i>
Local herds	1	-	-	-
Foreign herds	-	1	2	3

The penalties for offenses, such as unauthorized charcoal making, instigating fires, and counterfeiting of marking instruments were as follows:

Making charcoal in undesignated forest tracts would be fined 20 *beşliks* (100 *kuruş*) in cash (Article 52).

Incendiaries of forest would be punished according to the provisions of the Article 164 of the Penal Code (Article 53).

Counterfeiting of marking instruments would be punished according to the Article 150 of the Penal Code (Article 54).

The persons, who could not be able to pay the cash fines and who did not have a guarantor, would be imprisoned one day for every 2 *beşliks* (10 *guruş*) (Article 59).

APPENDIX 3

SELECTED ARCHIVAL DOCUMENTS

Exploitation des forêts

La Turquie possède encore de vastes forêts dont jusqu'à présent le Trésor public n'a retiré aucun avantage. Parmi ces forêts, il y en a qui appartiennent à des particuliers; d'autres que l'on peut considérer comme le patrimoine de communes qui de temps immémorial, en ont eu la jouissance entière; d'autres enfin et c'est le plus grand nombre, qui n'étant spécialement en la possession de personne, doivent être regardées comme propriété de l'Etat; mais dans ces dernières, ainsi que dans les autres, sauf quelques réserves dans l'intérêt de la marine impériale, les sujets de l'empire se livrent à des exploitations qui ne sont pas contrôlées, et c'est par ces exploitations que sont satisfaites les besoins des villes, notamment ceux de la capitale.

Il y a plus: il est notoire que dans certaines localités, les bois sont l'objet d'un commerce avec les pays étrangers et que par exemple c'est avec ceux de la Carmanie que les Grecs conduisent la plupart de leurs navires.

Pour remédier à cette situation et faire tourner au profit de l'Etat une partie au moins des revenus que renferment les forêts qui lui appartiennent, il faudrait y organiser une surveillance efficace, y interdire toute exploitation sans autorisation préalable, y placer les agents spéciaux qui ont été formés par l'Etat qui existait il y a 3 ans, en former d'autres, appliquer en un mot à ces forêts le règlement approuvé par l'Asadi en date du 2 novembre 1862. Pour les ventes on se bornerait dans le principe à satisfaire aux exigences.

L. Tassy's Memorandum (French). I. DH. 38044.

adjudications

du Commerce local par des concessions gratuites. Au début, ces concessions seraient sans doute peu productives; mais peu à peu, avec les progrès de l'administration et de l'ordre, le prix du bois s'éleverait, le cercle des amesures s'élargirait et il arriverait un moment où des adjudications importantes pourraient se faire avec succès.

Ce moyen de tirer parti des forêts de l'empire serait lent, mais peut-être le plus sûr; tout-fois, les bois propres aux constructions sont aujourd'hui tellement recherchés en Europe, qu'on pourrait essayer dès à présent de tirer ceux de la Turquie à la spéculation étrangère, sans attendre qu'elle vienne les trouver, et à cet effet, il y aurait deux manières de procéder:

1^o. Concéder des forêts entières, à long terme, sous condition de n'y couper chaque année qu'un nombre d'arbres déterminés; et ce, moyennant une redevance fixe ou proportionnelle au volume de bois abattu.

2^o. Offrir aux spéculateurs un certain nombre d'arbres préalablement marqués et estimés par des agents du gouvernement; et ce, moyennant un prix qui serait ou fixé par une adjudication ou débattu à l'amiable. un délai pour l'exploitation, en rapport avec la quantité de bois vendue, serait accordé à l'adjudicataire.

Le 1^{er} de ces moyens exigerait de longues et coûteuses études; car c'est un travail délicat et compliqué que celui qui a pour objet de déterminer ce que l'on peut annuellement exploiter dans une forêt sans en compromettre l'avenir.

Le 2^e moyen peut être appliqué beaucoup plus promptement et à moins de frais.

Il y a en Bessie, dans la province du Danube, sur les bords du Carasou, non loin de Salouique, au nord-est et sur la côte entre la Dardanelles et ^{en caramanie}, et sur les bords de la mer Noire entre Sinope et Samson, des forêts susceptibles d'être exploitées avec profit pour l'Etat, d'après les renseignements qui ont été recueillis à leur sujet et est à présumer qu'on pourrait y prendre 1 million d'arbres, sans appauvrir sensiblement les richesses de l'empire; or, si ce million d'arbres se vendait seulement 5 millions de francs, à raison de 5 francs l'arbre, ce serait un résultat d'une faible valeur sans doute en lui-même, mais très important par les conséquences qu'il aurait pour l'exploitation sur une plus grande échelle ~~comme~~ des ressources forestières de la Turquie.

L'opération mériterait donc d'être tentée et on le croit qu'elle réussirait, si elle était confiée à des hommes intelligents et si en outre, comme on l'a déjà fait observer, le gouvernement garantirait aux exploitants, par l'application du règlement forestier, que le bois qui leur aurait été vendu ne serait pas détourné de sa destination.

Il y a déjà en Bessie un agent ancien élève de l'École, qui y a fait de ^{bonnes} choses et qu'on pourrait charger, en lui adjoignant deux de ses camarades, de choisir et de surveiller des arbres dans cette province.

Dans la province du Danube, il y a aussi trois agents auxquels des missions ont déjà été données dans le même sens.

On devrait envoyer dans les forêts qui bordent le Carasou

deux agents appelés de France et leur adjoindre un des élèves de l'école de Constantinople.

Trois autres commissions semblablement composées seraient employées : la 1^{re} en Carmanis, la 2^e au mont Ida, la 3^e sur les bords de la mer noire entre Sinope et Samsoûr.

Ces six commissions seraient guidées dans leurs explorations par des gens du pays que les autorités locales mettraient à leur disposition; elles feraient des reconnaissances générales avant de fixer les endroits où cueillir ou bien les marchandises. Ces endroits, ils les choisiraient aussi près que possible de la mer, et des ports d'embarquement; ils marqueraient ensuite avec des marques spéciales, au tant d'arbres que le comprendrait l'état des lieux, et ils fourniraient de leurs opérations des rapports indiquant :

- 1^o le nombre des arbres, leur espèce, leur volume en bois de feu et de service;
- 2^o les frais qu'occasionnera leur exploitation, d'après la main d'œuvre dans la localité;
- 3^o les frais de transport des produits, d'après la prix des attelages, l'éloignement des ports d'embarquement, l'état des chemins et les dépenses à faire pour l'améliorer;
- 4^o les frais d'embarquement et les frais de route depuis le port d'embarquement jusqu'au lieu probable de consommation;
- 5^o le prix des produits au lieu de consommation;

Avec ces renseignements, il serait aisé d'établir le prix des arbres sur pied et celui qu'on pourrait retirer de ces arbres.

On pense que les six commissions fonctionnant, chacune avec le maréchal pouraier, si elles étaient installées dès le mois

le mois d'août prochain, jusqu'à l'année prochaine, chacune
50 à 60000 arbres et qui faisait un total de 250 à 300000.

Lorsque l'administration supérieure avait vérifié et
approuvé les procès verbaux de ces commissions, il en faisait
publier le résumé, en même temps que le règlement fondé, dans
les principaux journaux d'Europe et fixait un délai pour
le dépôt des soumissions qui ne manqueraient sans doute
pas de lui être admises.

L'exécution du projet que l'on vient d'exposer
entraînerait les dépenses suivantes:

Les agents forestiers français du grade de sous-inspecteur
ou de garde général, pendant 1 an, 16000 fr pour
chacun, y compris les frais de transport de France à
Coudenberg. en totalité 64000 fr.

Les gardes généraux adjoints du même pays
8000 fr. pour chacun - en totalité 32000

Frais de nourriture et d'habillement 10000

Frais d'ouvriers 5000

Frais de bureaux 3000

Frais de voyage ou de séjour sur les lieux
des opérations 50000

164000

On n'a pas compris dans cette évaluation les frais
qui seraient occasionnés par les élèves de l'école, parce qu'on
a supposé que dans tous les cas, ces élèves pour lesquels
une proposition spéciale a d'ailleurs été faite, seraient
placés

اورمانريك ايدلس خيوضه داز بويج برجه سيدر

ممالك خردس داخله خريه جيلم نك هيچ برصورتله استفاد ايره ميكا يك حوه اورمانر موجودر بورنك بيفيسي
 اهليده سونك بورنك تحت تصرف نده دبيفيزي مده تصدق كوي دفعيله مخصوص اويوب فقط كنج نك عهده تصرف اوليايه
 برصوه اورمانر واردر كه بورنك املاك ميريه ده عداوتسي لازم كلور رساله عامره بر بويج برصوه اورمانر مسك اولر نه
 كرك املاك ميريه ده معدود اولسي لازم كلوره اورمانر وه درك سازلر نه بكونه تفصيل و تصديق اولر نه صرف
 تصدق سا هانه استابول ديلاو سانس نك احيا جانا بخرنه اغراج قطع و فروخته ايدرك كجا تجارته ايلك اولر نه
 بقه برصوه ممالك ايجيه رض خيا كراسته و احساب نقل و اخراج ايدرك اولر نه رض يونانلر كيدر نك حوضي
 قويمه اياق كراسته يله انسا ايلك بولمقدي معامدور بور ممالك اصلاحي و ميريه اورمانريك حاوي اولر نه ضابع
 ترونك هيچ اولر اير بر جردنر نه دولت عليه نك استفاد ايره يلمسي اورمانريك بورنك صوره صحيفه معادرا تفصيل احوالا
 داوچه رخصت بجهتله ايفتريه اغراج قطعك كجا تحت مجموعه انسي داوچ نه اول معبود اولانه اولر نه بگندينه نك
 ايمه اورمانر نه بالوقبه ايفضا ايره يرله مقرر تعيين ديديا بولملاو اورمانر ايدلس و ايفضل بجهتله ايفضا
 اجراي اهكانه اراد سيبه جنبه يارداهي معلوم و ترنصودور بولسه اولانه اورمانه نك نمانه سنيك ايجوميريه اورمانريك تصدق
 سويج اجراي قومي خصوصيه موقوفدر

ايراي اورده بجهت عداولانه اورمانر داخله خريه كفايه ايره چك قدر و يارص يارص ايدلسيدر برصورت احيا راديفيني
 حاله در عقبه كجا استفاد اولر نيز ايدرك اورمانر لايقيد تحت انقسام و انقباض لغوب تجارتي قيمي نره و طابوي
 نيز ايدرك ايرود يك حوه اغراج صانيد حوضي با استباهدر

ممالك خردس اورمانريك ايدلس خيوضه استوقاعده رعايه اولر نه حاله نك اورمانر نه صورت و سمد استفاد
 اولر نه بار اولر نه مده حجاج اولر ايرج بوباب ان ايمه و صاعلم طريقه قاعده نك نك انجازدر نك اولر نه باقده
 اورمانر افه و انشانه اويرس كراسته سويديانيز ايمه ناور و تصول ايفضل داخله خريه نك اورمانريك حوه
 اولر نه

Ottoman-Turkish translation of Tassy's Memorandum.

ابتداء امره بجهت عدولانه او ماندر داخل مرفاهه كفايه ايره جاك قدر وياريم ياريم ايتليلدر بصورت اختيار وظيفي
 حلك در عقبه كل استفاد اولد مزاريم كدرنك او ماندر لا يقيد تحت انتظام وانضباط الوهب تجارنك قيمتي تره و طابقي
 نماين ايدرك ايدوم يك حوده اغاخ صائيله صفي با استباهدر

ملاك حرم او ماندرينك ايتليلي حقت استوقاعده و عايناه اولينين حلك نكدر او ماندرده صورت و سمد استفاد
 اولونه باره اوزونه سده محتاج اولور ايرج بوبانك ان اميه و صاعلم طريقه قاعده نكدرنك نك اخا زير نطه اولور بايه
 اور و باره ايبه و انك انشاه اولورنك كرامه سمدري زياد سيلم نادر و قبول اولونه داخل مرفاهه نكدرنك اور و باره يك حوده
 تجارنك سيمي مكنه و برفه صحتن ايك صحتا موجود اولوبها برنجين هونه مقدار ميهه تجارنك قطع ايتلك و خزانه جليله قطع اولونه
 تجارنك مقدارنه نسته و وجود مظهرها سوي مناسب بربرك و برك سطليله توبه برادرانك مده طويلا ايله طابيه اهلمه نكدرنه
 و تجارنك برادرمانده هونه مقدار تجارنك قطع سيب اولور ايرج اولور اولور مازوري معرفيه اشارت اولورده و هر برفاهه ايجن
 مدي ايله يا و سنايه و وجود غذ المزين برها نصير قدره صاعلمه و صائيله اغاخ حلك قطعي ايجوبه عد و نكدرنك ستميه
 بروفه مناسب اعطه اولونه خصوصيه حباردر

برادرمانده بونك قصه و مجوزيني خاطر به قوتكدرنه سوي مقدار اغاخ كدرنك لازم كدرنك نيمه ايتلك عايله و برفه ايتلك
 برفه صحت اولونيدنه برنجين صورنك اجناس اهلمسي تصور اولونه اولونه حقت اوزونه اولورنك تحقيقاته و تحقيقاته و بنايه
 مبالغه كليه صدفه محتاج اولوبها ايجن صورنك اير كمال ستمه و عايله ازموند موقع اجراء كوتيله بايود

بونه و فوه و لوسهري داغشك و سايونك جوارنك ذوق قره صو سوسونك و قاز صفت و صانه قلعس اطرافش و فوه ايتلك
 سوب و صاسونه بونك خزانه جليله مضمين صورنك ايتليلير بيلم جاك صلي او ماندر موجود اولوب و در سنا ايدرك تحقيقاته
 نظر ايتجو او ماندرده ممالك حرم نك تره ارضيه سياه نه يك جزا خلق كدرنك بوليان اغاخ قطع اولور بايود ايجن
 بدي لاقب سدرانه جليله سبه ميوه و نانه و فوه اولونين حلك حقل اولوجه قره ايتلك كيرنك قره حقيقت

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اونبارش ابرم بوسر مايلم اولده ازاره سي توسيع اولدره ديگر اورمانلر دهن ايتديليويجا بوجلاله نيا ديهيله استفاده اولدغي ايتكاردر

اورمانلر ايتلاري حصص اولده قشودن شروسه موقع تجريم وضعه سايله ايدون اقاتلر سابقه رده معلوم اولوب بويان اهدياو مئورل ايتكارم اولدغي و با خوصصن بالاده بيايه اولدغي اوزره اولده لفته مانا موقع اجراء قونايوب مديرتلر قطع ايره جباري ايتكارلر كنده نهدنه منع اولدغي حاله بديل و صرف اولده جده هم واقف مانان هيا اولوب اوزده ايتكاره منع سي ماهده اولدغي مئورل قوبر

موضوع بخت اولده اورمانلر صورت ازاره و عقاله كنج ساقا ايتكار كنده بيشه بونسه بوزان بويان مئورل اولد اوزم برصه قم اماره و وجوده كورسه لفته معينه رفقا سنده ايك كسي ديرديرك ايتكار قطع و ايتكاره تعبيه اولد بيلور

طوره ولايتلر دهن اوج مئورل اوزم مسخره نظر بيايه و قوسه ايتديكي صورت عملي و حكومت ايتلاري ايتكار مئورل اوزم بونده اوزم تعبيه كوندر

قره جو سوهلر بولماه اورمانلر ايتكار دهن و ايتكاره ايك اوزمجي جلب ديانلرني و سمارت اورمانلر كنده هيتي بوزان ترفيه اولدره بوسورنه برفه سوز تريب ايتكاره كوندر ليدور و بوجولم ديكر اوج قوسيه دهن تريب و كين اولدره برسي قونيه و برسي قازم دهن اورمانلرني و ديكر صماسونه ايتكاره بئنده واقع اورمانلر تعبيه ورسا اولدورلر

تفصيل اولد حكومت

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طوبه ولائیت رضی اوج مایور اویس مسیحی نطقاً بیانه و توضیح دیگر صورت عمل و حرکت ایملری ایچین من اولدی بوندی ادم تعلیمت کوندیلندر

نه اختیار اویسی
بی تریه و طایبی

قره هو سوهنک بولماه اورماندا ایچین رضی و نازده ایچ اورمانجی جلب دیاندرنه در سادات اورمانه کچمنه حیصه بولما
ترقیه اولدرنه بو صورت بر قیسیون ترتیب ایلدی کوندیلندر و بودجه و دیگر اوج قیسیونه رضی ترتیب وکیل اولدرنه
بسی قوبه درین قارطی اویماندرنه و دیگر مهامونه ایله سیویب بنیده واقع اورمانه تعبیه و اسالی اولمیلندر

در استفاد
له انور مع مایه
ویله یک صوبه
بیر قطع اولدی
طایفه احکام قیسه
دهر باغ ایچین
دیگورن سترایه

مذکور قیسیونلر اغاجاره حکم ایله ناسه رضی فاعده سی اجراء ماسترته ایله حکماری اورمانه قیسه تعیین نه اول حکومته
حکیم معقیده یلدرنه معینه ویرلرک قیله غوزدرک دلایلده مایور قیسه ای اورمانلر هر طرفی ایچین ایچین و معاینه اولدی
اسکده بقیه مایور اورمانلر تحس اوی رضی مایور اغاج ناسه ایدرک بو اغاجلرک عدد و نوعی و نه مقدار کراسه
اویس و قدری اوردو قیسه نه ایدرکن تانیا حکم اجرتیه اورمانلر ایچین ایچین مایور مایور مایور مایور مایور مایور
عبر کراسه مقدار نه نظر مایور قیسه ناسه ایچین اوی رضی و اسکلرک درجه معینه دیولدرک هالته و معید درجه ایچین
ایچین مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور
اوی رضی خاصا بو اغاجلرک ایچین اوی رضی مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور مایور
استحصالی اولدی صوبه معلومه سیه سنت ده کراسه اغاجلرک و کراسه صاعین حاله مقدار مصلحت ویردی

بیلد قیسه ناسه
در قیسه ناسه
بیلور اغاج
در حقیقت

بقیه ایله

مذکورہ کمیٹی کے ایک نیا ڈیپارٹمنٹ تشکیل دینے پر بلاشبہ اتفاق کیا جائے گا۔ اس بات پر اتفاق ہے کہ اس کمیٹی کے ذریعے
ہاں بہتر طریقہ پر اس کے ایک ہی ایجنسی کے تحت تمام کاموں کو انجام دیا جائے اور اس کے تحت ایک ہی ایجنسی کے ذریعے کاموں کو

کمیٹی کے ذریعے کوئی ایجنسی کے تحت تمام کاموں کو انجام دیا جائے اور اس کے تحت ایک ہی ایجنسی کے ذریعے کاموں کو
ہاں اور اس کے تحت تمام کاموں کو انجام دیا جائے اور اس کے تحت ایک ہی ایجنسی کے ذریعے کاموں کو
برسرِ تفہیم اور دیکھ بھال کے تحت تمام کاموں کو انجام دیا جائے اور اس کے تحت ایک ہی ایجنسی کے ذریعے کاموں کو

موضوع کے بارے میں اور اس کے تحت تمام کاموں کو انجام دیا جائے اور اس کے تحت ایک ہی ایجنسی کے ذریعے کاموں کو

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quelques portions former plusieurs groupes distincts, ne devront pas dépasser, en additionnant leurs surfaces, la superficie totale d'un carré ayant trente kilomètres de côté, et devront être renfermées dans les limites de la zone ci-dessus indiquée.

L'exploitation de ces forêts appartenant à M. le Baron de Hirsch, ou à ses ayants droit, pendant la période ci-dessus déterminée, à la charge d'exploitation son père de famille et de sa famille, et de sa famille, et de sa famille, conformément aux lois de l'Empire actuellement en vigueur, mais sous aucune exigence d'administration forestière, et sera, en outre, affranchi pour cette période, de tous impôts, droits ou redevances quelconques, sous quelque nom que ce soit, à l'exception d'une redevance annuelle de mille francs qu'il paie au Gouvernement.

Article 3.

À l'expiration de la période de vingt-cinq ans fixée ci-dessus, l'exploitation sera reprise au Gouvernement avec toutes les installations, bâtiments, etc., etc., établis par le concessionnaire, sans aucune indemnité quelconque.

Fait double à Fontenay-lez-Dijon le dix-huit Mai, Mil huit cent soixante et Douze.

(Signé) M. de Hirsch. (Signé) Mathis

ایرانی مالک

سابقہ مالک اور زمیندارانہ طور پر انحصار سے گذر اور مالک کے لئے
 مابقی تمام اراضی کے لئے زمیندارانہ طور پر انحصار سے گذر اور مالک کے لئے
 مابقی تمام اراضی کے لئے زمیندارانہ طور پر انحصار سے گذر اور مالک کے لئے

ایرانی مالک اور زمیندارانہ طور پر انحصار سے گذر اور مالک کے لئے
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مابقی تمام اراضی کے لئے زمیندارانہ طور پر انحصار سے گذر اور مالک کے لئے
 (محمود)

معلوم علی جناب صدراعظمی بولینگی و دیار ممالک موردی شایسته و دفع مری اورینده عقده مقدر فرزند اولاد نظامه افقته حصه موقوفه و احاطه
 و بنسبه اولاد تجارت نفعی و فایده هر مملکت ملوک طرفین دقت اولاد لاندیده ایکنه برسدنیزو شرفیوه دقت و انکسار اولاد نه نظامه نکرده
 مری الیوم طرفین بیانی نفعی حکم برسد و هرکس کذوق و نجا نیکوینه راست کدیگی مملکت استیجی کجی اعلی کسبه اورینده تحریب ایکنک اولاد نه بی
 اولاد اورینده تناسل اعلمه و جلال اولاد ایکنه بزرگتره کزاسته قلعوه دچر لینه وارسه اولادینقی تحقیقه و اتقار اولادنه ایکنک بوسن بوسن برضای ایدر ایدر
 شرفیوه دقت اولاد ایدر بوسه فریب اولاد نه لریسه اولادجه کزاسته کز استک کز استک و شفته یکدیگی بریدای و بهر شرفیوه نزدیکه موقوفه موقوفه
 اولاد معوریت مملکت و اراضی قضا خدیسته معیار بولینگی مجلس عیون فرید و حصه مزارک اولاد کزاسته اولادین نظامه اولادین نظامه اولادین نظامه
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 بولینگی تقیر اولاد



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General Probe of 1851.

حکام محروسه شاهانه ده کافه اورمانلرک استعلاک احوال و کتبانه دار و لایه عظام و متصرفین کرام و محصلین و قائمها ملر طرفلرینه لاجل الارسال قلمه التان استعلانامه عومیدر

بهر سنجاق و قضا ده کائن اورمانلرک مقدار عددی و جوائب ار بسمه سی سنور زله هجیوارزی بولسان قضا و قصبه و قرا و محاکم تصدیقه اسماری و موطنلری بالاطراف ایضا ایشمار اولنه

ایشور اورمانلرک طول و عرض مسافه سی و وسعتی ایشمار اولتیق
 یور اورمانلرک موجود بولان اناج لرک علی الاطلاق جنس و قس یا باشلری یعنی قاج سنه ک اناج اولدقلری ایشمار اولتیق
 هر بر اورمانلرک بقینده بولان لک بولک شهر لک اسمی و اورمانلرک بعد مسافه سی
 هر بر اورمانلرک ذکر قیلرندن لک بقین اولدینکی اسکله و ساحل اولان بوللرک بهرینک اسمی و بعد مسافه سی
 هر بر اورمانلرک بلر نهر اولوب اولدینکی حالده نهرک جسمانی یعنی قایلر وصال الیه ایشمار قلمه قابل اولوب اولدینکی وقتی طرفدن نهر و منبع اولدینکی

ایشور اورمانلرک قنی قضا لک کرک اودون و کرک کراسته کدکلری و کور حرق ایشکلری
 سواحل مذکورده نهار اولوب اولدینکی و اولدینکی حالده بقوله کی و قایلرک کیده یسه چکی
 ایشور اورمانلرک قطع و نقل اولان کراسته و سائر قنی بخارلر اولور ایدوی
 ایشور اورمانلرک عرب بولاری و جانه زری اولوب اولدینکی حالده بعد مسافه زری اولدینکی حالده نظر قیلر بول بایلمه حساب یعنی حفلی اوله چکی
 و اول بوللرک نغمدار مصارف الیه بایله به چکی و بوللر بایلمدینکی حالده نصورتده منافع مشاهده اولنده چکی
 شو اورمانلرک کراسته و اودون قضا معناد ایه سنه ده نغمدار کی یوک کراسته و اودون قطع اولننده ایدوی و نه جنس کراسته اولدینکی
 شو اورمانلرک جوار لنده حرارت تمبر اولور دستزه واری اولدینکی تصدیقه ججه نغمدار ایدوی و بقوله اناج ییدیک
 ایشور حرار لک اصحابی تصرفده اولوب و یاخود میری حرار زری اولدینکی و مقدار و پرکول نغمدار ایدوی و یوقوله بشفه حرارلر انشاسی بکومه قلمه منصفین اوله چکی

ایشور اورمانلرک جوار لنده کی و یاخود قایلر انشاسی تکمیلدر و الحاله هذه انشا اولننده میدر و اولننده ایه سنه نغمدار کی و قایلر انشا اولننده در
 ایشور اورمانلرک قطع اولننده اولان اناج لرک نوجهه نقل اولننده در یعنی کسبلان اناج لرک طاعتدن یورایق الیه ی نقل اولنور و یوخه نهر ملابسه سیله می و یاخود عرب و بلرکیر واسطه سیله می ندر بولور ایدوی
 ایشور اورمانلرک نهار نغمدار کراسته و اودون اوله قرق و کرک کور بولتیق ایچون اناج کسبلوری وقتی طرفه و نصل نقل اولنور اولدینکی
 ایشور اورمانلرک سینه و یاخود بیا ایچون و یا کور بولتیق ایچون و یاخود اودون ایچون کسبلان اناج لرک ن اولورمانلرک و یا کور کیلر و یاخود سا کسبلر و پرکول و بوللری و برادینکی حالده نغمدار و بولور ایدینکی

ایشور اورمانلرک بلانود و قرمز کسبلر و جسیجه اریخ اناجی و ماضی و رچینا و قطران و اخلامور اچی و سائر یونره مقبوس حاصلات اولوری
 ایشور محصولات اولان بخارلر سنه نغمدار طاقه سنه نغمدار محصول و بولور اولدینکی
 ایشور محصولات ایشور و یاخود سا کسبلر کور بولوری و برادینکی الیه نه اعتبار الیه ی لیدینکی
 ایشور اورمانلرک ایچنده ذخاره دار و سائر بعض محصولات متذکرین اکیلوری و اکر اکیلور ایه کبارک طرفدن و نغمدار اکیلور ایدوی
 ایشور اورمانلرک جانب ترسانه عامر ایچون مقدما قطع اولنن و الحاله هذه بلطافه و محلنده و یاخود اسکله لنده بسمانه قلمش کراسته لاری و نغمدار و جنس و نه چایددر

ایشور اورمانلرک ایشمار و سائر حیوانات بلایق و قشلاقلری و ایدیر اولدینکی حالده بلایقه نلبه نه اعتبار الیه نغمدار و پرکول و تور و کبار طرفدن التور
 ایشور اورمانلرک کرک تجارت نغمدار محال سازه به نقل ایچون و کرک ملکتنده استعمال اولتیق ایچون قطع اولنن اجناس کراسته کراسته اسکله لره و کرک قصبه لره
 چاب و قیادت چارسی و کذک اودون و کورک بهلری دقزلی دخی تنظیم و جانب نظارت بیه ترسانه عامر مه ارسال اولتیق
 ایشور اورمانلرک ایشور کسبلرک عهد سنه بولسان اورمانلرک اولدینکی حالده متصرفک سندی ایشور و معاینه اولوب ایچینا چاه صالح اوللری قول اوله جفتدن بشفه چاه
 دقزلی تنظیم اولتیق و برکسند قوبه بر اورمانلرک متصرف ایچون برکونه خدر اولنن بایضاح قلمتی و سند قویسی اولدینکی حالده اعتبار اولنن جفتدن بویله تقیادت
 ایضایمک لایقه اجراسی و ایچینا چاه صالح قوی سند الیه متصرف اولنن سندی برکونه نظارت بیه ترسانه عامر طرفه دقزله معا ایهائی لازم کله چکی
 بعض بخارلر قریله مخصوص اوله قرق اورمانلرک ایشور جفتدن ایشور اوله اورمانلرک قریله اهلایسی بیه مینی محتاجدر و کور اورمانلرک انتفاقلری بقوله شیار ایلدر
 مراسم بیان و اشعار اولنن

ایشور سئوال اولنن مسائل محرره ک لازم کلان جوابلری معلومت سابقه زه تطبیقا و بر لبوب اورمانلرک اطرا قشد مکائن قرا اختیار زری و ارباب و قوف
 سائر ک مجلس و شوراهه چلب و وجهیه خلافندن بری و کسب و اخفاسدن طری اوله قرق صحیحی و جهله تخمینه کمال احتیاط و دقت و بعض اورمانلرک بویله
 و اسکله و لیمه لنده بولسان لک بولک مأمورلر بانفس و یاخود اول مأمورلر لیمه لنده آدملری کدیوب معاینه و کرک کی تحقیق ایشور لیمه لنده بولنصکر
 اقتضاسی وجهه ترسانه نظارت بیه سی جابنندن بشفه مدبرلر تعیین و ارسال اولنن جفتدن بعده خلاف ظهور نده ایشور شورالری کرک کی تحقیق
 ایتمکسزین جواب و بریش اولان مأمورین مسؤل اوله جفتلری شعیبدن بیه ل
 ایشور استعلانامه ک بهر مأمورلر و وصولندن اعتبار اولنن کون مرور بیه قدر جواب لازم عمل بیک بندشد دفتر کلنده نهر و موجود بولسان مأمورین
 دولت علیه و اعضای مجلس طرفلرندن زری مجهر اولنن قرق مساعره بوجهیه ارسالنه اقدام و غیرت اولتیق

اصحابی عهد لنده بولسان طساع و قور بولن ترسانه ک ایشور بران اناج لری شوک بولک قطع ایتمی و ایشور برسی باراده سنیه ممنوع بولن بشفه و اولنلور
 ایشور ک وقت مروریله بشفه چکی جهله هیچ بر وقته تلف و اضاعه سی جا ز اولوب هر زده بولنور ایه ترسانه ایچون حفلی لازم کلسه چکنه مینی شوخصوصه
 هر بولک مجلسلری طرفلرندن نظارت و دقت اولنن قرقی جبار اولان کادی ایشور کراسته سندن ماعدا فوق العاده چاید بقطعه کراسته قطع اولور
 و اسکله زه کولور بولن ایه هیچ بر محله نغمدار رخصت و بر لبوب بولن بیدینکی محال و اسکله ده بالوقف قنی جبال و اورمانلرک قطع و نقل اولنن بیدینکی و نه جنس
 و بیلده اناج و کیک مال ایدوی بالتحقیق کیفیت جانب ترسانه عامر به ایشور و لیمه الیه ترسانه به برادینکی اولدینکی حالده بولر قند و قوصوبله چکی ایشمار اوزر نده
 اناج جفته کوره ترسانه ججه مقید اولان قیادت مقرر سنه توفیقا ایجاب الیه مصارف نقلیه و قطع عیسی ترسانه خزنه سندن و برک اوزر منسب و ایشور برادینکی
 اولدینکی صورتده صاحبیه ترک و اعطای اولنن

ایبیه	اورده	افق	افروم	اکتبه	اونه	ایسنا	بشار	جده	جرازیفی
معه	رابطه	زارطه	ظنه	سته	سوزیه	جلسه	شرف	شکار	صلا
طربشویه	طرزونه	قرینه	نظن	کوشه	کریه	دوبه	هلاک	بینه	یانه و یله
انقوده	اصح	نیفا	بعی	تصالح	جانبه	روزیه	قده	نص	مصلح
نیسه	نورسناه	نقزیه	نفراد	عطا	دارنه	نورظریه	پونه	ایپه	ازیه
اکتبه ناکته	اسلیه	اسروز	ارطه	افق	ارو	ایچان	ارک	ارنگ	ارک
ایوان	پشت	پایزه	په	پوج	پشته	پوردو	تغرفه	تک	معه
جیره	مطاه	صیه	دیلمیک	درام	دانه	دکجه	درسم	روانزه	یجانه
سویه	سروز	سوز	صوبه	صخره	صخره	صخره	طایفه	طرسه	طایفه
عدلیه	عبدال	قد	قریبه	ناجه	ناجه	کلیجه	قضا ایه	قضا ایه	نص و صارت
کوتاهیه	کسبه	کفک	کوشیده	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج
کوتاهیه	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج
کوتاهیه	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج	کلیج

دَارُ الْحَيْكَةِ الْعَلِيَّةِ

ملوٛ قوما نالخی غزئو صا ط بک

عاز

عزئو بک
 ملوٛ قومیون نئی عزئو عرابا ناک کتبت خذمتق بولنامه محمدافندی ایله اورنلی سیداعا قوشوق افندی دارسینا دولتی تیسرینده قومیون
 مذکور خذمتق سقتم موسوقلام بر قوماینه اولدورقه طوطیه قریب سوموه دیار کسره غلندیده کلیلو حطب قطع ایندیریه تدارک ایندیلی
 بولک قابضدایله ممکنه نقل اینولک اوزده اولدورکی دیوننده بئق قومیونده اولدورله اطلوال جبالنده بک جوده کراسه کیریل
 اورمانلوه اولدوه محلد ترلاهیئنه کیردیکی اینولودولتوقیودانه یئق قیزی اولدنی بالوردو باتیکره بابعالیم کوندریلوله قیلمک
 اینا و اشعار قنسیله کیفیت مجس احکام عدلییه لکی الحواله موسی الیهامک اولد کلیلو حطب و کراسه قلمید جبال مرفوعه ی قنسی
 ایلمدی تجویز اولدیمه جیفنده بعداینده اورمانلرک تلفده وقایس ضمنتک ایجاب ایده محلد سبعا قویجی قیسده اولدورده حسه
 محظمه سید زلزله بکونه اونیوننرلوه وقوعه کتولسی امرانه اعتنا و همت اولمنی سسته ولسی دولتوی یخ قنسیله یازلسه
 اولدیفنده بعداینده جبال مرفوعه ده اولد حطب و کراسه قطع اولدورقه نزل اده طرز کویله جبالک اولیغی نقیبه ده
 صالحیولیس موسی الیهامک قطع ابدیب ده عتک برافردکی حطبک دخی اولد و ایشا ایله خفتنیلد باله ناک توقیف ایندیلس
 خصوصیک طرفه بیدریلس تکر اولسنه اولغه اققیا سنک اجرا و انسته همت ایلمک یقینغه نغ قویلدکی

طوبہ قومیسوئے رئیس عمر نلو عمر یا سا ناک کتاب خدمتندہ بوظن محمد قدی اہلہ اور نہ لی حیدر غا و نوقیہ قدی و سید
 دولتی نیر سندنہ قومیسوئے مذکور خدمتندہ مستخدم موسو فلام بر قومیا نہ اولد رفہ طوبیج قریب صوموہ و بار کرکے
 کلیا و حطب قطع ایندرب و ب تدارک ایند کلری بیوک فایضاً لیم ممکنینہ نقل ایچک اوزر اولد قاری و بوند
 بشقہ قومیسوئے طرفندنہ اولحوالہ جبالندنہ یک جوہ کرانہ کسب بر بلو با ویا ناولہ اولد محکمہ تر و اھنہ کیری
 اینا و دفعہ یوقولانہ پیش حضرتی طرفہ بالور و دبا نکرہ با عالیہ کبندریلا نخریز لکرم انرا و اعراضہ کبیت
 مجلس احکام عدلیہ لدی الحوالہ موسی الراجک اویلہ کلیا و حطب و کرانہ قطعہ جبال مرقومہ ی تحریب اہلاری
 تجویز اولد مہ خدمتندہ بعد زبہ او یانارک لھندہ و فایسی خدمتندہ بیجا بدہ محکمہ ریعا فوجی نصب اولد رفہ
 صمدی قطعہ سبہ زہار بکونہ او یوقولانہ وقوع کتولاسی امر لھندہ اغنا وھمہ و قسی سندنہ والسی حضرتی طرفہ
 یا یسی اولد بقندنہ بعد زبہ جبال مرقومہ دنہ اولہ حطب و کرانہ قطع اولد رفہ زہار او نہ طرفہ کجور بک
 اولینقی تقدیرم صالیویر لیم ^{لیسی} ^{توقیف خط ایندریسی} ^{لیسی} محمد و نوقیہ فلیخی و موسی الراجک قطع ایندرب و یغین بر قز قاری حطبک
 زہی والا متار لہ حضرتی لیم بالجاب ^{لیسی} ^{توقیف خط ایندریسی} ^{لیسی} جنیلیم قرو حفا ولہ رفہ امامہ عالم سناک حیرتہ جلیلم بکوند لک
 اوزر سال صدیقہ نسیمی خصوصاًک طرفندہ بلدیسی مذکور و قسی اولدندہ اقتضاسک اجرو ذمہ

ھما بھکذ سید فتح

تصویر افکار

۱۲۷۸

صفر ۲۵ (پنجشنبه) ۹ آگستوس (حدیث و معارف و از عثمانی غرتہ سی) سنہ ۱۲۷۹ (ہجرت) ۱۶ نومبر

ہفتہ دہ ایکی دفعہ اس تاہولدہ طبع و نشر اولتور۔ غرتہ خانہ سی جدید یہ دہ کا شدر۔ معارف و امور خبر یہ اعلانیاتی مجا ناباصیلور۔ لئی آیلنی ۸۰ و اوچ آیلنی ۴۰ و پر نسخہ سی ۱۰ غروشدہ در۔ ایالات ایله ممالک اجنبیہ ایچون پوستہ اجرئی علاوہ قتلور۔

حوادث اخلیتہ

پہلی تخت

فریق سعادتو خالد پاشا حضرت تریک صوفیہ ویش فرقتہ عسکر بہ سنہ قوماندان نصب و تعیین یوردلیغی ایشیدلشدر۔

خارجیہ تحریرات کاتبی سعادتو ابرو افندی یہ توجیہ یوردلشدر۔

(بوکرہ تعیین یور بلان نائب افندیلر)

معلمخانہ نواب متعللریدن مودتو السید محمد وہی افندی

تیمور حصار ناچی سابق مودتو یحیی افندی فرہ جکہ قدرہ ناچی مودتو عمر لطفی افندی کاخہ

معلمخانہ نواب متعللریدن مودتو اسماعیل حق افندی قوجکیر عشیرتی تعبیر اولتور قضارہ

چهار شنبہ کیچہ سی قاسم پاشادہ کائن قولاق سز نام محلدہ قرق درت بنا محترق اولشدر۔

صورت اعمالی رسما مجهول و یقین و قدرہ قدر بین الناس تداولی مقبول اولان مہر سز قوائم نقد یہ تک یوزاک والبلکری نقصانہ طویلامقدہ بولنان ایاق صرافلرینک بعضیاری بکر میلک طشرہ قائمہ لرینک مہر لرینی چبقاروب بولنرہ امتزاجلی صورتدہ یا پشدرہ رقی بند خلفہ سوریکدہ اولد قناری بودفعدہ وقوع بولان بردعوا اثناسندہ عند الحکومہ تبین ایش اولغلہ مقام تبصرہ دہ بیان حالہ ابدالر اولندی۔

۶۵

تیمار تخانہ عامرہ دائرہ سنندہ مقدمات تشکیل اولنان اورمان مکتبندہ تحصیل ایله بوندن بریحق سنہ اول شہادت نامہ آلمش اولان افندیلر دن وترجہ اوپہ سی خلفا سندن فتوتلو عثمان راغب افندینک اورمانلرہ دائر قلمہ آلدیغی بریحق صورتی

سیلو بکتور تعبیر اولنان زراعت و اورمان فن و ادارہ سنہ دائرہ حاجتہ عمومہ بر معلومات مجبہ اعطاسی آرزو سیلہ فن مذکورک دقت و اعتنا یہ شایان اولان مباحثی بوندن بویلہ وقت مساعد اولدیغیہ تصویر افکار واسطہ سیلہ اعلان ایملک تصورندہ اولدیغیہ منبہ تعالی یقین و قدہ تحت نظامہ التمسی قویا مأمول اولان ممالک شاہانہ اورمانلرینک حسن ادارہ و محافظہ سی مہسرا اولدقدہ تمقدار تمتع و فائدہ سی حاصل اولیہ جکی قایسہ اولغنی اوزرہ فرانسه اورمانلرینک درجہ وسعت و واردات و مصارف ایلہ احوال ساثرہ سنک بیتنہ کاشتغال سز و قمتدہ ابدالر ایدرم۔

فرانسہ دہ ذات امیراطورینک تنزہ و تفریحہ مخصوص اولان اورمانلر دن بشقہ میری اورمانلرینک وسعتی برملیون یمشیدی بیک قرق الی اقتار اولوب (براقشار اون دوغدر) بہر اقتارندن لا اقل اوتوز درت فراتیق سنوی واردات حساسیلہ اوتوزیدی ملیوندن قرق ملیونہ قدر مذکور اورمانلرک وارداتی وارددر۔

ممالک شاہانہ دہ کائن اورمانلرک وسعتی سکرز ملیون اولدیغی کشف و تخمین اولغشدر کہ فرانسه اورمانلرینک سکرز میلی دیمک اولور۔

بوکونکی کون فرانسه تک دوات اورمانلرندہ ۳۵ محافظ و ۱۸۶ اورمان ناظری و ۶۰۰ قوریچی باشی و ۴۰۰۰ نفر قوریچی استخدا م اولغقدہ بولمش و بولنرک معاش و مصارف درت ملیون سکرز بولمالی بیک وغرس فدان و امثال عملیاتہ و انشای طرف و ساثرہ یہ دخی سنوی ایکی ملیون یدیزوز ایش بیک فراتیق کہ جمعا سنوی یدی ملیون ایتوز بکر می الی فراتیق مصارف تخصیص اولغشدر۔

Osman Ragib's article in the *Tasvir-i Efkar* newspaper.

بومصرفك بخارجتده اوله رفق اورمان مكاتبك دخی سنوی التمش بك فرانق مصارق وارذر .
 دولت مشارالیهالك ۴۰ قباق و ۶۰ فرقتین و ۱۳۰ قوروت و ۱۰۰۰ قدر اوفق سفن حریبه سنك سنوی انشا و تعمیراته مخصص اولان كراستهك مقداری اوچوز المی بك مترومكعب اولوب سفن تجاریه سی دخی برهلمون طونیلاتو یعنی اون بشبك بشبوز اون التی بك سفینه دیمك اولد یغندن بونلرك امر انشا و تعمیراته سنوی مخصص اولان كراستهك مقداری دخی درتیوز بك مترومكعب بالغ اولقده در .

فرانسه ده كائن تجور بولرینك مسافه سی اون بك كیلومتر و حساب اونوب (درت كیلومتر و بر میل فرانسویدر) سنوی طرق مذكوره ك تعمیر و انشاسته صرف اولان كراستهك مقداری اوچوز التمش بیکدن درتیوز بك مترومكعب قدر اولدیغی محققدر .

۱۲۱۹ سنه میلادیه سنه كلنجه په قدر فرانسه اورمانلری تحت نظام و اداره ده اولوب شوونك بونك تحت تصرفنده ایكن تاریخ مذكوره فرانسه ایمرطور زدن قلب اوکوستك امریله اولدجه اداره آلتنه التمش و ۱۳۴۶ تاریخنده قلب د ووالوا زماننده ثابت مکیل بر نظامنامه قلبه الله رفق اورمانلر کرکی کبی بولنه قونلش و ۱۶۶۹ ده یعنی اون دردیجی لوی عصرنده اورمانلرک حسن اداره و محافظه سنه فوق العایه اهتمام و دقت اولدرق حتی اورمانلرجه وقوع بولان بالجله جنایاتک رؤیت و حکمی اورمانلر اداره سنه بالمر مخصوص حواله قلند یغندن از باب جنایاتک وقوع بولان خسار و ضرر ل بنگ بون بون اوی کسدرلمشدر .

ایالات

وارنه ده بر باب مکاتب رشدییه تک انشاسی بودفعه ختام بولد یغندن کتب لازمه سبیله مع اولنك درسعادتن تعیین قرار کبر اولش و روسیجی بلده سنه منازع فیها اولان بر مدرسسه ایچنده نعل ایتمکده بولنان رشدییه شاگردانیجون شهر مذکورک حکومت قونانغی قرشوسنده دخی نیم کار کبر اوله رفق ایکی خانلی ودرت بش اوطقل بر باب رشدییه مکنتی بنا اولقده بولمشدر .

اشبو ایکی مکاتبک انشاسته کافی سلسره والبسی دولتلو عارف پاشا حضرتلریله مامورین محلیه واهالی طرفلندن اعانانقده اعطا اولنلش اولد یغندن ناشی عمومده عاند اولان بویه بر خدمت خبریه تک اعلاتنه مع المبتویه مسارعت ایدرز .

شامدن تحریرات مخصوصه - فی ۴ صفر قره طایغ نالیستی کبی درزی طایغی چوارنده دخی قوه

جزویه عسکریه ایله بر بونك مضفریت قرانقله اداره مصریه وایام سالقده داتماسرکشلکدن کروطوریمین درزی باغبرلی کاملا دائره اطاعته دخول ایتش و عربان اشقیاسی دخی خلیجه چرا کورد کد نصرکه چوارده بیلنگری او یونلری اوینامق اوزره بوحوالیدن چکیلوب کتیش اولد قلرندن کبفت برتفصیل حکومت محلیه جابندن در سعاده اشعار اولمشدر .

حوالہ خارجیه

اوروپا

انکلتزه قرالیچہ سی طرفندن اوله رفق پارلمنتونک تعطیلی کونی قرانت اولنلش اولان نطق رسمینک دولت علیه په دائر برقره سیدر

دولت عثمانیه تک سرحد اولان ایالاتدن بعضیلرند فسادات ظهور ایتشدر ۱۸۵۶ سنه سی پارس معاهده سنی امضالاش اولان دولترک مرخصلری پینده استانبولده عقد اولسان مشورته دا خل اولسنی قرالیچہ حضرتلری کندینک در سعادت سفیرینه تقویض ایلدی . اشبو مشورنده بحث اولدجق مسائل دول متفقہ معاهده ل بونک نضمانته موافق و حقوق مشروعه بادشاهی په و ممالکی اهانل عیسویه سنک رفاهنه مطابق صورنده حل اولدجق قرالیچہ حضرتلری اعتقاد ایتمکده در .

قوچنچین اقلینک ضبطی حقدہ اسپانیانک فرانسه په وقوع بولان معاوننه مینی آنام ایمرطوری جابندن ترک اولنلش اولان ممالکک برازینه مشار الیها اسپانیا دولتک دخی حصه دار اولدجقن ابقانام اسپانیول غزته سی ادعا اید یور .

آسیا

چرکستاندن (در سعاده کلان) تحریرات مخصوصه - فی ۹ صفر سخومک آرقه سنده کائن کوه البرزه یقین غایت صیق طاغیراراسنده ساکن مدازی وایغ و بوضو نام آبازه قبیله زدن چرکستان مجلسی معرفتیه جمع ایدلش اولان پرفرقه مسلحه کوه البرز جوارنده واقع روسیه قاعه وقریه لری اوزرینه دفعه قول قول هجوم ایدرک روسیه عسکریه اهاالسنندن خلیجه نفوس تلف ایتش و کسدرلرینک التمش و فیاتی و بونک ایکی مثلی بحر وحرلی وقوع بولوب آلتیبیک رأس حیوان ایله ده بر جوق غنائم سائرله رفق مملکتلرینه عودت ایتشلردر .