

## CHAPTER 1

# Introduction

### Abstract

This chapter introduces major concepts -including ecosystems, provisionism, and free trade- along with key themes such as disease outbreaks, migratory movements, and land conflicts, and poses questions to be addressed in the subsequent chapters. It identifies human and non-human actors that will take the center stage in the narrative and discusses some notable developments in livestock and meat industries during the nineteenth and early twentieth centuries. This discussion illustrates that, similar to its counterparts in Europe and America, the Ottoman Empire witnessed increased meat consumption in urban areas, driven by population growth and advances in communication and transportation technologies. The chapter then briefly traces the evolution of Ottoman urban provisioning networks from the eighteenth to early twentieth centuries, highlighting the growing importance of Anatolia as a source of sheep for Istanbul's slaughter needs. Finally, it introduces the primary sources utilized for this study and provides an overview of the next five chapters.

**Keywords:** Ottoman Empire; Anatolia; livestock trade; meat; ecosystem; provisionism; free trade

Trades intimately connected with that of cooks are those of butchers, bakers, and poulterers. Meat, principally mutton, is supplied by the neighboring districts of Roomelia and Anatolia, except about the time of Beiram, when numerous flocks are driven towards the capital from distant provinces. The sheep are of various kinds. Those of the European districts are small, long-horned, long-wooled, and resembling the coarse breeds of England...

The Anatolian breeds of sheep are larger and coarser than those of Roomelia. Their heads are heavy and strongly arched, their legs long and bony, and their fleeces extremely coarse. Their weight averages from fifty to sixty pounds, but they are not preferred for the kitchen. The broad-tailed doomba is not uncommon. It is a large, unwieldy animal, with superabundant offal. Its tail-fat, sometimes weighing twelve or fourteen pounds, is esteemed for culinary purposes.<sup>1</sup>

This is how Charles White, an English journalist and military officer, narrated his impressions of the sheep and meat trade in Istanbul in the early 1840s.<sup>2</sup> Although his account highlights the role of Anatolia as an important supplier of sheep for slaughter, literature on the food provisioning of Istanbul has paid little attention

to examining this role. While works dealing with the period from the seventeenth to mid-nineteenth centuries focus primarily on shipments from Rumelia (the European part of the empire),<sup>3</sup> the period from the 1850s to World War I remain overall little studied.<sup>4</sup> In this book, we follow a different path and trace the growth of livestock, particularly sheep trade from Anatolian provinces to Istanbul and other major urban markets in the nineteenth and early twentieth centuries. This growth, we argue, unfolded within the broader framework of economic, social, political, environmental, and technological shifts. A myriad of factors, ranging from administrative practices and policies to the impacts of wars, financial crises, and environmental challenges such as epidemics and famines, intricately shaped the political economy of livestock trade. While these factors had considerable impact on the lives of both human and non-human actors involved in the trade, they were also influenced by them.

From the early nineteenth century onwards, the gradual territorial losses experienced by the Ottomans in Rumelia, the primary supplier of meat to Istanbul, threatened a decline in sheep and cattle shipments. The situation was compounded by the displacement of populations due to these territorial losses. Combined with migration from the countryside to port cities, this contributed to a significant increase in urban populations and drove up the demand for food, including animal products like meat. Consequently, the demand for livestock from various regions of Anatolia surged, catering not only to the capital but also to other major urban centers. However, these population movements and increase in livestock trade also created conditions ripe for the outbreak and spread of epidemics and epizootics, further exacerbated by the strain on resources in various parts of Anatolia. This resource pressure, in turn, laid the groundwork for social tensions and conflicts across Anatolia, involving a multitude of human and non-human actors with diverse interests.

Meanwhile, the modernizing Ottoman state implemented two policies that significantly impacted the livestock and meat trade. First, liberal economic reforms introduced from the 1830s onward led to the relinquishment of government regulatory control over livestock markets by the late 1860s. Consequently, the Ottoman ruling elites entrusted the provisioning of their capital to free market forces. However, this shift towards free trade was not abrupt; it involved a gradual transition, often oscillating between provisionist concerns – especially during environmental, economic, and political crises – and liberal policies. Second, as part of nineteenth-century centralizing reforms, the government undertook the settlement of nomadic and semi-nomadic tribes, crucial sources of livestock in Anatolia. Contrary to expectations, sedentarization did not lead to a decline in tribal livestock. Instead, the role of tribes in the livestock trade remained significant, albeit in altered forms after settlement.

In the subsequent pages, this book analyses the evolution of livestock production and trade in Anatolia within the context of these and other emerging developments. It focuses on three key regions: central, northeastern, and northwestern Anatolia, and four eastern Mediterranean ports: İzmir (Smyrna), İskenderun (Alexandretta), Mersin, and Antalya (Adalia). These regions were chosen due to their status as major suppliers of sheep to Istanbul in the nineteenth and early twentieth centuries, while the ports served as outlets for exports to Istanbul and other markets, particularly Egypt. Rather than using conventional units of provinces or categorizations that view Anatolia, the Balkans, and Arab lands as holistic entities, this book defines regional economies through the interactions of goods, services, and human interventions in ecosystems. These economies were characterized by the features of their geographical locations, ecosystems, and human activities, which brought about economic growth often accompanied by social tensions and conflicts.<sup>5</sup> A separate chapter will scrutinize Istanbul as the central hub of livestock trade networks, with a focus on state policies regarding meat provisioning of the city and regulation of the urban market and landscape for animal slaughter and sale.

By highlighting diverse ecosystems and socioeconomic dynamics, the subsequent chapters aim to address several key questions, ultimately contributing to the literature on Ottoman environmental and socioeconomic history: How did the ecosystems and socioeconomic dynamics of the aforementioned regions and ports change in the nineteenth and early twentieth centuries? What were the repercussions of these changes on livestock production and trade? How did they impact the organization of livestock and meat trade in Istanbul?

### **Setting the Ottoman Experience in a Broader Context**

While the Ottoman Empire witnessed a major transformation in livestock and meat trade, marked by a gradual shift towards liberal policies and an increasing reliance on supplies from Anatolia, its contemporaries also underwent significant changes. The time period covered by this study witnessed a major expansion in the livestock trade and meat industry in different parts of the world, which was encouraged by a whole host of factors. One was the upward trend in meat consumption in many Western countries, from the United States, Britain, and Germany to Denmark and Spain, due mainly to urbanization.<sup>6</sup> In major nineteenth-century cities, such as New York, Mexico City, and Paris, this paved the way for the liberalization of meat provisioning.<sup>7</sup> Still, another factor was improved communication, transportation, and cooling technologies that, in the words of Gergely Baics and Mikkel Thelle, “enabled the expansion of regional supply chains to national, international, and global markets.”<sup>8</sup> For example, in the United States, the rapid extension of the railroad network

led to the emergence of Chicago and Kansas City as two major livestock markets, each with strong connections to Midwest cattle towns. Moreover, the advent of refrigerated train cars in the 1870s allowed Chicago meat packers to make dressed-beef shipments to distant markets.<sup>9</sup> At around the same time, transoceanic shipment of frozen meat also became feasible. The first such shipment was made in 1877 from Buenos Aires to the French port of Le Havre. Only a few years later, steamers began to carry frozen beef and mutton from Australia and New Zealand to England.<sup>10</sup>

These developments went hand in hand with important changes in the butchering industry and livestock production. In Europe and the Americas, artisanal butchery was gradually giving way to industrial processes in abattoirs and meatpacking plants.<sup>11</sup> Meanwhile, livestock raisers in these and other parts of the world showed willingness to benefit from the increased demand for meat. In the United States, for instance, merino sheep production increased significantly during the Civil War, from 1861 to 1865, as wool from it was used for manufacturing military uniforms. When wool prices fell sharply following the end of the war, American producers began to crossbreed merino with French and English varieties known for their good meat quality. The resulting breeds generated a new market for mutton and lamb.<sup>12</sup> Likewise, as Rebecca Woods notes, raisers in New Zealand saw an opportunity in the burgeoning frozen meat trade “to revitalize a pastoral economy that, because of its emphasis on a single product, wool, was very much at the mercy of the vicissitudes of international markets.” The crossbreeding experiments they engaged in resulted in the formation of new breeds, such as Corriedale, producing high-quality mutton for British consumers.<sup>13</sup>

As it became increasingly integrated into the capitalist world economy and experienced some degree of urbanization in its last century, the Ottoman Empire did not remain isolated and untouched by these developments. Until its demise, the empire maintained a predominantly agrarian society, with rural dwellers comprising about 80 percent of the total population by the early twentieth century. However, between 1840 and 1914, several cities underwent rapid growth, particularly due to migratory flows and capitalist expansion. While, for instance, İzmir’s population nearly tripled and reached 300,000, that of Damascus doubled to around 240,000. Meanwhile, Istanbul, the largest urban center in the empire, exceeded a million.<sup>14</sup> Although it is difficult to determine whether this growth was accompanied by a rise in per capita meat consumption, total urban demand increased alongside the growing number of consumers. James Grehan, for example, estimates that in the late eighteenth century, Damascene butchers slaughtered between 60,000 and 75,000 sheep annually. By the eve of World War I, this number had apparently increased to around 85,000.<sup>15</sup> Likewise, as detailed in Chapter 6, Istanbul’s demand for slaughtered animals doubled from the 1840s to the early 1910s.

During this period, modern transportation technologies that enabled the expansion of the livestock trade and meat industry in different parts of the world

also became available in the Ottoman Empire. Istanbul and İzmir became better connected to major centers of livestock raising in Anatolia and beyond, thanks to the introduction of trains and steamships. In Anatolia, the first railroad tracks were laid from İzmir to Aydın in the early 1860s, and shortly afterward a second line was opened to this booming port city through Kasaba. About two and a half decades later, the German-financed Anatolian Railroad Company built a line from Istanbul to Ankara, with a branch to Konya.<sup>16</sup> Yet, the effect of these efforts on the Anatolian livestock trade remained limited. Similar to their counterparts in the Russian Empire, many merchants from the provinces of Ankara and Konya continued to drive their sheep to market on foot.<sup>17</sup> That was partly because the rates charged by the railroad companies seemed high to them, and partly because they wanted to choose their destination en route by comparing prices in major urban markets. However, the story of steamships that began to appear in Ottoman waters in the 1820s evolved differently.<sup>18</sup> While, unlike many cities in the United States and Europe, shipments of frozen meat did not become accessible in Istanbul, steamers became widely used for transporting live sheep, cattle, and lambs from north-eastern, northwestern, and western Anatolia to the city. During the same period, Egypt emerged as a major consumer of Anatolian sheep and cattle as well, due to a combination of factors such as the growth of urban populations, the introduction of mandatory military service, the spread of cash crop farming, and loss of a large number of animals to epizootics.<sup>19</sup> As Egyptian consumers increasingly depended on imports, steamers laden with sheep and cattle began to frequently travel from the ports of İzmir, İskenderun and Mersin to Alexandria and Port Said.

To gain deeper insights into these developments, it is essential to delve into the political economy of the livestock trade. This exploration could begin by examining alterations in the state policies and supply networks serving the empire's major urban centers, notably the capital, and how they provided fresh meat from the late eighteenth to the early twentieth centuries.

### **State Policies: Provisionism, Free Trade, and Interventions in Times of Crises**

Like various other early modern urban centers in Europe, Istanbul, where mutton was the main meat consumed, depended on a complex and regulated sheep supply chain.<sup>20</sup> As early as the late fifteenth century, state authorities established a system called *celepkeşan* to provide for the needs of the imperial palace and troops, state dependents, and the general populace in the city.<sup>21</sup> The system was based on the registration of a group of wealthy people from Rumelian provinces to annually supply the capital with a certain number of sheep. Once a *celepkeş* (registered sheep merchant) collected and brought the animals required of him to Istanbul, he was

to sell them under the supervision of *koyun emini* (overseer of the provision of the sheep for the state) to the city's butchers at a price fixed by the government.<sup>22</sup> This practice, however, began to decline in the late sixteenth century when the empire fell into a severe crisis characterized by long-lasting wars fought on both eastern and western fronts, skyrocketing inflation, adverse climatic conditions of the Little Ice Age, and frequent internal uprisings.<sup>23</sup> As the registered merchants failed to fulfill their deliveries to Istanbul under these conditions, the government turned the *celepkeşan* in-kind obligation into a cash tax in some regions and used the revenues generated by it to organize the collection and transportation of sheep from Rumelia to Istanbul.<sup>24</sup> This system remained in force until the early 1780s, when a new in-kind tax, called the *ondalık ağnam* (one-in-ten sheep tax), was introduced in Rumelian provinces, except for Moldavia (Boğdan), Wallachia (Eflak), Scutari (İşkodra), and Bosnia. The *ondalık ağnam* required herders to hand over one-tenth of their sheep to the state at prices far below their market value in order to ensure a regular supply of meat to soldiers, state dependents, and other residents in Istanbul. By the early nineteenth century, the number of animals collected through this tax had reached significant levels – hundreds of thousands annually.<sup>25</sup>

The *celepkeşan* system and the *ondalık ağnam* tax were mainly applied in Rumelia,<sup>26</sup> because the Istanbul populace preferred the mutton from thin-tailed *Kıvrıkcık* sheep raised in this region over that of the fat-tailed *Karaman* breeds in Asia Minor.<sup>27</sup> This, however, does not mean that from the late fifteenth to early nineteenth centuries the capital exclusively relied on provinces to its north and west for the provision of meat. Especially at times when shipments from Rumelia appeared insufficient, Ottoman ruling elites turned to Anatolian provinces for supplies. One such period was the 1590s, when the Ottomans were then engaged in a prolonged war against the Habsburgs in central Europe. Since meat supplies in Rumelia were reserved primarily for the fighting troops, demand for Anatolian sheep peaked. Authorities in the imperial capital issued frequent orders to provincial officials and tribal leaders in Anatolia, instructing them to direct flocks of sheep from their localities to Istanbul.<sup>28</sup> To give but one example, in 1596, the governor-general (*beylerbeyi*) of Karaman in central Anatolia was ordered to collect and send 200,000 heads to the capital, a move that triggered a major rural uprising.<sup>29</sup> As will be demonstrated in Chapters 2 and 3, a similar surge in demand occurred in the late eighteenth and early nineteenth centuries, as wars, territorial losses, and other calamities disrupted supply networks in Rumelia. By the 1840s, annual sheep shipments from Asia Minor to Istanbul had reached about 150,000 heads per year, but this was still less than one-fourth of the number of animals slaughtered in the city.<sup>30</sup>

Both the number and percentage of these shipments increased substantially in the latter half of the nineteenth century. In the early 1870s, a British consular official reported that the annual consumption of meat for Istanbul necessitated the

slaughter of 1,140,000 animals: 1,120,000 sheep and lambs, and 20,000 oxen. Of these, about 300,000 came from the Anatolian provinces of the empire.<sup>31</sup> In the following two decades, the annual slaughter increased by about 30 percent, while shipments from Anatolia rose by 45 percent.<sup>32</sup> This upward trend had, however, little to do with the state's provisionist policies, many of which – as will be further discussed in the following chapters – were abolished before the 1870s due to inflationary pressures on meat prices. The shift to liberal policies accelerated after the Crimean War (1853–56) when meat prices in Istanbul and other cities increased significantly. Parallel to the adoption of free trade policies in other sectors of the economy after the Anglo-Ottoman Treaty of Baltalimanı (1838), the abolition of *ondalık ağnam* in 1857 and the removal of price ceilings (*narh*) by 1862 virtually ended government regulation of the livestock trade to Istanbul. Yet, state authorities did not completely withdraw from the market. The Tanzimat reforms required government involvement in urban life, particularly through new institutions such as municipalities that addressed sanitation and health issues in the livestock trade. Because the capital lacked a centralized abattoir until the early 1920s, the Istanbul Municipality, for instance, took steps to tighten regulatory oversight over slaughterhouses to ensure the wholesomeness of meat supplies. Meanwhile, the state remained the primary buyer of beef and mutton, distributing them to military troops, board schools, orphanages, hospitals, and dervish lodges in the city. Provisionist concerns also required its intervention in the market during times of political, economic, and environmental calamities through various means, such as import restrictions.<sup>33</sup>

The Ottoman state's role extended beyond crafting regulatory market policies. As a modernizing state, it sought to tap the resources of its population more effectively. For this purpose, the government pursued different policies in major centers of sheep export in Anatolia, tailored to the specific political, demographic, and environmental circumstances of each region. In central Anatolia, where pastoralist tribes constituted a very large part of the population, the government initiated a sedentarization campaign in the early nineteenth century. This move posed a serious threat to the livelihoods of tribes, as it aimed to restrict and ultimately end their seasonal migrations between winter and summer pastures. Considerable progress in that direction had already been made by the 1860s; however, as Chapter 2 will demonstrate this did not mean that tribal groups were powerless in the face of the sedentarization campaign. Instead, the fact that Istanbul relied considerably on their sheep for meat gave them negotiating power. Thus, some among them could continue to engage in long-distance seasonal migration with their animals, at least until the 1900s, with approval from state authorities.

Eastern Anatolia, with its large tribal population, too had become the scene of state efforts at sedentarization. When the Hamidian government established tribal cavalry units called the Hamidiye Light Cavalry Regiments (*Hamidiye Hafif Süvari*

*Alayları*) in this region in 1890, one of its goals was the permanent settlement of nomads. While this was only partly accomplished, the formation of the regiments significantly reconfigured the socioeconomic and political landscape of the region. Tribal chiefs who joined the Hamidiye expanded and consolidated their power, and thus, as Chapter 3 points out, they managed to appropriate a portion of the wealth generated by increased sheep exports to Istanbul.<sup>34</sup> The state also played a role in this increase by launching infrastructure projects to improve the channels of trade. A major initiative was the construction of an extensive telegraph network within a relatively short span of time, which allowed some provincial merchants to relocate their headquarters to Istanbul and establish connections with diverse interior regions.<sup>35</sup>

Meanwhile, some infrastructure projects deliberately aimed to change the ecosystem of major livestock-raising regions. As will be discussed in Chapter 4, in the middle section of the south Marmara littoral that comprised part of Hüdavendigar province, there were various attempts from the mid-nineteenth century to the 1900s to drain wetlands in order to facilitate the settlement of refugees arriving in large numbers from the Caucasus, Crimea, and Rumelia.<sup>36</sup> The reclamation of wetlands, we argue, was part of a larger process of increased state intervention in the lives of non-human actors.<sup>37</sup> This process also involved introducing quarantine measures and vaccines to combat animal diseases, as well as the use of crossbreeding to improve the wool or meat quality of local sheep breeds. However, these efforts proceeded unevenly among the provinces. They were more noticeable in Hüdavendigar than in central and northeastern Anatolia. One factor behind this was that Hüdavendigar housed a state farming enterprise which, for a while, actively engaged in crossbreeding merino sheep with native stock to supply fine-quality wool to state-run textile factories.<sup>38</sup> Apparently, due to this enterprise and Hüdavendigar's vital role in the meat provisioning of Istanbul during winter months, some sanitary measures intended to control epizootics were also first experimented within this province in the 1890s.

Ottoman state policies affected the functioning of livestock trade and the material conditions of both human and non-human actors, while at the same time being negotiated and reconfigured by them, as seen in the above examples from different regional economies of Anatolia. The following two sections introduce these actors in detail, highlighting their role in shaping not only trade but also social and political dynamics in their regions and beyond.

### **Human Actors of Livestock Trade**

As it traces trade networks that connected different parts of rural Anatolia to Istanbul and other major urban markets, this study represents an effort to contribute to



the small but growing body of scholarly work that highlights the economic and commercial dynamism of the Ottoman Empire's interior regions.<sup>39</sup> In addition to examining state policies, it emphasizes the agency of both human and non-human actors in the formation and evolution of these networks. Among human actors were entrepreneurs who sought to capitalize on the increased demand for meat by setting up trading, livestock raising, and grazing ventures. They included a wide range of people, from state elites (including Sultan Abdülhamid II) and prominent Istanbul bankers to local notables such as tribal chiefs, large landholders, and merchants.

The expansion of the livestock trade contributed to capital accumulation in the hands of these actors, transforming some into major capitalist entrepreneurs. An early example was the Chalikov family, whose story Andreas Lyberatos has recounted. In the early nineteenth century, the family employed more than 2,000 people in the *ondalık ağnam* tax collection network in Rumelia and in the delivery of collected sheep to Istanbul.<sup>40</sup> A later one was Christakis Zografos, who will be discussed in Chapters 4 and 6. He worked as a contractor in the late 1850s and early 1860s, providing cheap meat supplies to state institutions. Through this venture, he accumulated a considerable fortune, which enabled him to become one of the notable Galata bankers and a prominent figure in Istanbul's Greek community. However, livestock business was not solely the domain of non-Muslim merchants. Contrary to the argument that Muslim capital was missing in the late Ottoman Empire and that trade was predominantly controlled by non-Muslims, this book highlights the active role of Muslim entrepreneurs in Ottoman economic life.<sup>41</sup> As will be discussed in Chapters 2, 3, 4, and 6, some of these entrepreneurs managed not only to accumulate economic capital but also to extend their political influence beyond the borders of their provinces over time. Figures like Çayırhızade Hilmi Efendi and Emin (Sazak) Bey accumulated large landholdings in central Anatolia, where they raised large flocks of sheep and goats for wool and meat. Their growing economic power granted them significant political influence both at the local and central administration levels. When the Grand National Assembly was convened in Ankara in 1920, both were present as deputies, alongside a prominent sheep merchant from northeastern Anatolia, Mühürdarzade Asım.

While highlighting such 'success stories,' this study will also shed light on the unequal social dynamics that underpinned them and the inherent economic risks associated with the livestock and meat trade. In the United States, continental Europe, and Australia, advancements in animal healthcare emerged alongside the development of transportation networks, refrigeration technologies, and the establishment of centralized modern slaughterhouses equipped with industrialized butchering, packaging, and sanitation facilities. However, despite widespread discussions about refrigeration and centralized abattoirs among the Ottomans, these facilities were not introduced in Istanbul until the end of the empire due to a lack

of state funds and strong resistance from merchants and butchers. This financial shortfall also resulted in the operation of the Istanbul livestock and meat markets on a credit basis, making them vulnerable to breakdowns. Under these conditions, bankruptcy and penury were constant threats, especially for small-scale butchers and merchants. As Chapter 6 will detail, these actors became increasingly vocal in demanding the establishment of a regulated market for livestock and meat. In the late nineteenth century, this demand led to intense debates and conflicts between various government bodies, including the Council of State, the Ministry of Interior, and the Istanbul Municipality. Meanwhile, due to the increased commercialization of pastures, driven by the growing sheep exports to Istanbul and other markets, the threat of dispossession became imminent for rural populations, particularly in northwestern and western Anatolia. This development, in turn, triggered long-lasting land conflicts, some of which will be discussed in Chapters 2, 4, and 5.

### Non-Human Actors

Sheep, cattle, and goats were not only commodities or ‘cash crops,’ as termed by Sarah Shields, to be traded; they were also active agents, influencing and being influenced by the social, economic, environmental, and political conditions in their localities and beyond.<sup>42</sup> An important non-human agent with the power to affect their lives was the climate. Together with geographic factors, such as altitude and soil, the climate had a major impact on the distribution of breeds. Chapters 4 and 5 demonstrate that during the winter months, the provinces of Hüdavendigâr and Aydın, located in northwestern and western Anatolia respectively, hosted large numbers of *Kıvrıkcık* sheep from Rumelia. This was due to their mild climate and availability of large pastures, which provided a stimulus for the growth of export trade from these areas. Meanwhile, central and eastern Anatolia specialized in raising different varieties of *Karaman* sheep, which were resistant to the colder and longer winters of these regions thanks to fat stored in their tails. Although the cold winters with considerable snowfall posed a serious challenge for livestock flocks and their raisers in the northeastern Anatolian province of Erzurum, several high mountain ranges created favorable conditions for spring and summer grazing. To fatten their cattle and sheep for export to different parts of the empire, the raisers could rely on fertile mountain pastures exposed by the melting snow.<sup>43</sup> Without these pastures, Erzurum’s role as a hub of interregional trade, connecting northeastern Anatolia with Russia, Iran, Syria, Egypt, and Istanbul – a topic that will be discussed in Chapter 3 – might not have been sustainable.

Although well adapted to local conditions in Anatolia, sheep and other livestock populations were vulnerable in the face of extreme climate events, such as severe

cold winters and droughts, which depleted their forage and ultimately led to many casualties. Additionally, the weakened survivors became more susceptible to diseases like anthrax and cattle plague. Throughout the late nineteenth and early twentieth centuries, the Ottoman Empire witnessed frequent outbreaks of epizootics, some of which took a heavy toll. During this period, the government's tribal settlement process further complicated the lives of animals. While they used to freely move from one pasture to another depending on weather and forage availability, their mobility became limited, causing considerable suffering. As detailed in Chapter 2, thousands of sheep in central Anatolia, denied access to their customary pastures, starved to death. Moreover, animals experienced considerable difficulties on their marches to markets. Even with the introduction of railroads and steamships, their journeys remained arduous. Packed tightly in wagons and on decks, they were not properly fed, resulting in considerable weight loss; many also fell victim to accidents, such as ship collisions.

As some recent studies have shown, the sufferings of livestock populations had significant consequences for human communities. Zozan Pehlivan, for example, points out that the decimation of the nomads' flocks by a series of droughts and severe cold waves associated with the El Niño Southern Oscillation was one of the underlying causes of the rise of violence in Ottoman Kurdistan during the late nineteenth and early twentieth centuries.<sup>44</sup> Similarly, this book reveals that some central Anatolian tribal groups, subjected to sedentarization, encountered serious economic difficulties, as their sheep died in large numbers. However, since this situation also had the potential to endanger Istanbul's meat supply, the government occasionally had to reconsider the limitations imposed on tribal mobility and allow their flocks access to their customary pastures. Moreover, deaths caused by diseases, cold weather, and droughts pressured the government to intervene in the livestock and meat trades through the implementation of price controls and export limitations, due to their impact on economic life in both rural and urban areas. In the latter, the scarcity of sheep and cattle for slaughter led to rising meat prices for consumers and increased tensions between butchers and government meat contractors, who relied on these animals to sustain their businesses.

The book delineates major periods of strain during the nineteenth and early twentieth centuries, often marked by concurrent extreme climate conditions, disease outbreaks, military conflicts, and economic downturns. Each chapter examines how these difficulties influenced and were responded to by the livestock trade networks in Anatolia. The initial period spanned from the early 1840s to the early 1860s. During this time, the three export regions – central, northeastern, and northwestern Anatolia – faced serious climatic and environmental challenges. Central Anatolia grappled with a devastating famine in the mid-1840s, which also affected parts of northeastern Anatolia. Moreover, in the latter region harsh winters struck first in 1847, followed by an outbreak of animal disease, and again in

1852, with both instances causing losses among sheep and cattle. Meanwhile, parts of northwestern Anatolia endured severe floods in the 1830s, with lingering effects into the 1840s and beyond, particularly on landholding patterns. Additionally, the period witnessed the Crimean War, which not only led to the diversion of livestock for slaughter supplies to support Ottoman forces and their allies but also exacerbated the financial problems of the empire. To address these problems, the government issued vast amounts of paper money (*kaime*), resulting in a major inflationary surge in the early 1860s.

These developments profoundly impacted the organization of animal trade and supply networks. First, as will be discussed in Chapter 2, the famine led to a severe debt crisis among the primary sheep suppliers in central Anatolia. This crisis, persisting into the 1850s, hastened the tribal settlement process and contributed to the abolition of the quota system, which required the Cihanbeyli and affiliated tribes in the region to supply a certain number of sheep to Istanbul. Similarly, the environmental calamities of the 1840s and early 1850s compelled the government to reduce the export quotas imposed on provincial actors in northeastern Anatolia for the capital. Second, as will be detailed in Chapter 6, meat prices in Istanbul, already on an upward trend, soared during the Crimean War and continued to rise in the early 1860s, marked by the state's increasing financial difficulties. Notably, many of the liberal reforms mentioned throughout the study, such as the abolition of the *ondalık ağnam* tax, the guild butchers' monopoly, and *narh* system in Istanbul, were introduced during this period, along with abolition of export quotas.

After a generally quiet 1860s, the second wave of strain struck between the early 1870s and early 1890s, marked by a harsh period of successive environmental disasters across a wide geography. Central Anatolia experienced a severe famine from 1873 to 1875, followed by a 'violent winter' in 1879–80 that decimated thousands of sheep in this region, as well as in northeastern and northwestern Anatolia. A similar situation emerged when drought hit central Anatolia, along with the Cilicia region, from 1886 to 1888 and northeastern Anatolia in the early 1890s. To make matters worse, these calamities were often followed by animal disease outbreaks, threatening the lives of weakened sheep and cattle. Moreover, during the early 1890s, cholera swept across the Ottoman Empire, compelling the government to establish a vast network of quarantine stations where many livestock en route to markets had to spend days, and sometimes weeks, together with their human guardians. The period in question also saw significant turmoil due to financial crisis caused by Great Depression of 1873 and the Ottoman-Russian war of 1877–78, which resulted in substantial territorial losses for the Ottomans and large-scale population movements into the capital and the Anatolian peninsula. These movements played an important role in the commercialization of pasture lands and escalation of land conflicts, particularly in Hüdavendigar province. Meanwhile,

in eastern Anatolia, where tensions between Kurds and Armenians were on the rise, there were increasing complaints about animal theft and the appropriation of locals' livestock by powerful political actors, such as Kurdish tribal chiefs who joined the Hamidiye regiments.

These developments had a considerable impact on the livestock and meat markets as well as state policies. The devastating wave of famine, war, severe winters, and disease outbreaks not only threatened agricultural production but also created inflationary pressures in urban markets in the late 1870s and early 1880s. During this period, there were widespread complaints about high meat prices in both Istanbul and İzmir. In response to such conditions, state interventions in the market continued and even intensified. To prevent an agricultural crisis, the export of farm animals was temporarily banned in various provinces across Anatolia. Moreover, in Istanbul, a guild of livestock merchants was established to allow the government closer control over the capital's meat market. Meanwhile, municipal officials in İzmir persisted in the practice of setting fixed prices for beef and mutton. The state's interventionism, however, extended beyond human actors. The late 1880s and early 1890s saw increased efforts by the government to safeguard animal welfare by containing the spread of contagious diseases. These included the introduction of quarantine regulations and undertaking studies to develop vaccines.

However, these efforts did not prevent a major outbreak of animal disease in Anatolian and Syrian provinces in the early twentieth century, marking another period of strain. This outbreak had mixed consequences. Similarly affected, Egypt experienced an increased demand for livestock, which led to a growing volume of exports from Ottoman ports, including İskenderun and İzmir. Combined with the large casualties caused by the outbreak and the harsh winters that struck Anatolia, particularly its central parts, in the 1900s, this situation also heightened concerns about the scarcity of farm animals and rising meat prices. Under such conditions, the government once again had to impose a temporary export ban on plough cattle. It also sought to utilize the guild of livestock merchants to ensure affordable prices in Istanbul. Yet, despite these hardships, the book demonstrates that Anatolian livestock trade significantly expanded, and the peninsula became an important supplier for both Istanbul and other markets during the last century of the empire. The following chapters will highlight the various factors that made this expansion possible, such as the introduction of new transportation technologies, changes made by merchants in the organization of the trade, and state policies.

Overall, as the above account suggests, this study not only examines how sheep and cattle were exchanged as commodities but also traces their experiences as living beings. Few studies consider animals as playing active roles in the making of Middle Eastern and Ottoman history. One, by Richard Bulliet, argues that because the cost of raising animals was lower in the Middle East and North Africa, it became

more advantageous to rely on animal power instead of using water and wind-based power mills in the eleventh and twelfth centuries.<sup>45</sup> Alan Mikhail's pioneering work similarly assigns agency to animals in shaping social and economic relations in Ottoman Egypt. He identifies a major transformation in agricultural production when landless peasants replaced animal power as the new labor force in the late eighteenth and early nineteenth centuries, a period when disease and extreme weather killed large numbers of animals.<sup>46</sup> Studies examining the interactions between human and animal actors are even more limited. In one such study, Semih Çelik demonstrates how state policies changed human-buffalo relations in the district of Kocaeli in northwestern Anatolia. When the Ottoman state, in the mid-nineteenth century, pressured peasants there to use their buffaloes for supplying timber to the imperial dockyards and government construction projects, most responded by selling the animals.<sup>47</sup> Likewise, Onur İnal studies camels as historical actors contributing to the incorporation of western Anatolia into the world market as they facilitated the transportation of goods and people.<sup>48</sup> The following chapters aim to contribute to this literature by exploring how livestock suffered during times of drought, famine, and sickness; how the settlement of tribes and commercialization of pastures affected their lives; how they travelled from their grazing grounds to Istanbul and other markets; and what awaited them in the capital. Meanwhile, they also examine how their experiences, particularly sufferings, affected the lives of human actors with whom they interacted. To answer these questions, the book draws on a variety of primary sources, which will be briefly introduced below.

## Sources

One of the major primary sources underpinning this study is the collection of documents from the Ottoman state archives in Istanbul. These documents include imperial decrees issued by the sultans, official correspondences from ministries, state councils, governors, provincial councils, and municipalities, reports compiled by diverse official commissions, and petitions submitted by livestock raisers, merchants, and butchers from different provinces. They offer a wealth of detailed information on the lives of animals, as well as various aspects of the livestock and meat trade. For example, they discuss the effects of environmental and other calamities on livestock populations, the volume of sheep and cattle exports from different Anatolian provinces to Istanbul and other urban markets, the routes taken by merchants and their shepherds en route to Istanbul, and the difficulties encountered by animals during these journeys. These documents also detail the dynamics of supply and demand influencing fluctuations in livestock and meat prices, and the sources of tension and conflict among different market stakeholders, including consumers, butchers, and municipal officials.

It is important to note here that given the extensive time span covered by this book – which coincided with significant administrative reforms within the empire – numerous state institutions played roles in regulating the livestock trade, and their functions evolved over time. Before its dissolution during the Tanzimat period, the office of the head butcher (*hassa kasapbaşı*) oversaw the organization of sheep supply from provinces to Istanbul. Typically, the head butchers relayed their requisition orders to the *kadıs* (judges) of provinces, making sharia court records important archival sources for the early nineteenth century. However, administrative restructuring led to the emergence of new institutions in the following decades, which supplanted the role of the head butcher. Ministries such as the Interior and Finance, the Council of State (*Şuray-ı Devlet*), and municipalities, particularly the Istanbul Municipality (*Şehremaneti*), gained prominence in regulating aspects of the livestock trade. Conflicting perspectives among these entities were not uncommon. While, for instance, municipalities often advocated for regulatory measures to ensure a sufficient meat supply for cities, the Council of State was concerned with the economic ramifications of such measures and favored free trade, as will be discussed in the following chapters.

The other Ottoman state documents we consulted are the sharia court registers for Ankara and the provincial yearbooks (*salnames*) of Ankara Aydın, Erzurum, Hüdavendigâr, and Konya provinces. The court registers, whose importance was mentioned above, meticulously record the *narh* prices for meat, allowing us to track price fluctuations from the 1780s to the 1850s. These registers also offer valuable insights into Ottoman provisionist policies and the challenges faced by merchants and their flocks en route to Istanbul. The provincial yearbooks, published in the latter half of the nineteenth and early twentieth centuries, contain noteworthy descriptions of the environmental and geographical conditions of their respective localities. Additionally, they feature data on livestock populations and sheep tax revenues, serving as indicators of the government's capacity to enumerate and tax animals. Since local resistance to taxation was commonplace, we do not assert the absolute accuracy of the data. Nonetheless, the yearbooks provide a means to observe trends and variations in the size of livestock populations in the aforementioned provinces.

Another major corpus of primary sources consulted for this study is the British consular documents, particularly the annual trade reports for Adana, Aleppo, Ankara, Bursa, Damascus, Erzurum, Istanbul, İzmir, Konya, and Trabzon. These reports often share the same limitation as provincial yearbooks: the figures they provide on the size of livestock populations and the volume of sheep and cattle exports represent approximate estimates. However, they can still be used to trace changes in the volume and direction of livestock trade in Anatolia from the mid-nineteenth century to the early 1910s. In addition to trade figures, these

reports furnish information on extreme climate events, epidemics, and epizootics, detailing their impacts on the livelihoods of sheep, goats, cattle, and other livestock. It is important to note that to increase the reliability of our analysis, we have cross-checked Ottoman and British state documents against each other and other primary and secondary sources, whenever possible. We observed that, although at times slightly varying in particulars such as export figures, they often verify and complement each other.

In addition to state documents, this study draws on newspapers (*Bursa, Sabah, the Levant Herald*, and *the Levant Herald and Eastern Express*) and ego-documents such as memoirs and travel accounts. The newspapers contain reports on the movement of meat prices in Istanbul, the spread of diseases in both humans and livestock, and the measures adopted by the government to contain prices and diseases. They also provide information about the rules of exchange in the Istanbul livestock and meat markets, as well as the dangers encountered by merchants and their flocks on their way to urban markets. Likewise, the memoirs and travel accounts of Ottoman subjects and foreigners offer insights into life in Ottoman cities and the countryside in the nineteenth and early twentieth centuries. While some of these accounts, like the one by the aforementioned Charles White, discuss in detail how the residents of Istanbul were supplied with meat, others provide vivid descriptions of the geography, climate, people, and trade networks of the major livestock-raising and export centers in Anatolia.

### **Organization of the Book**

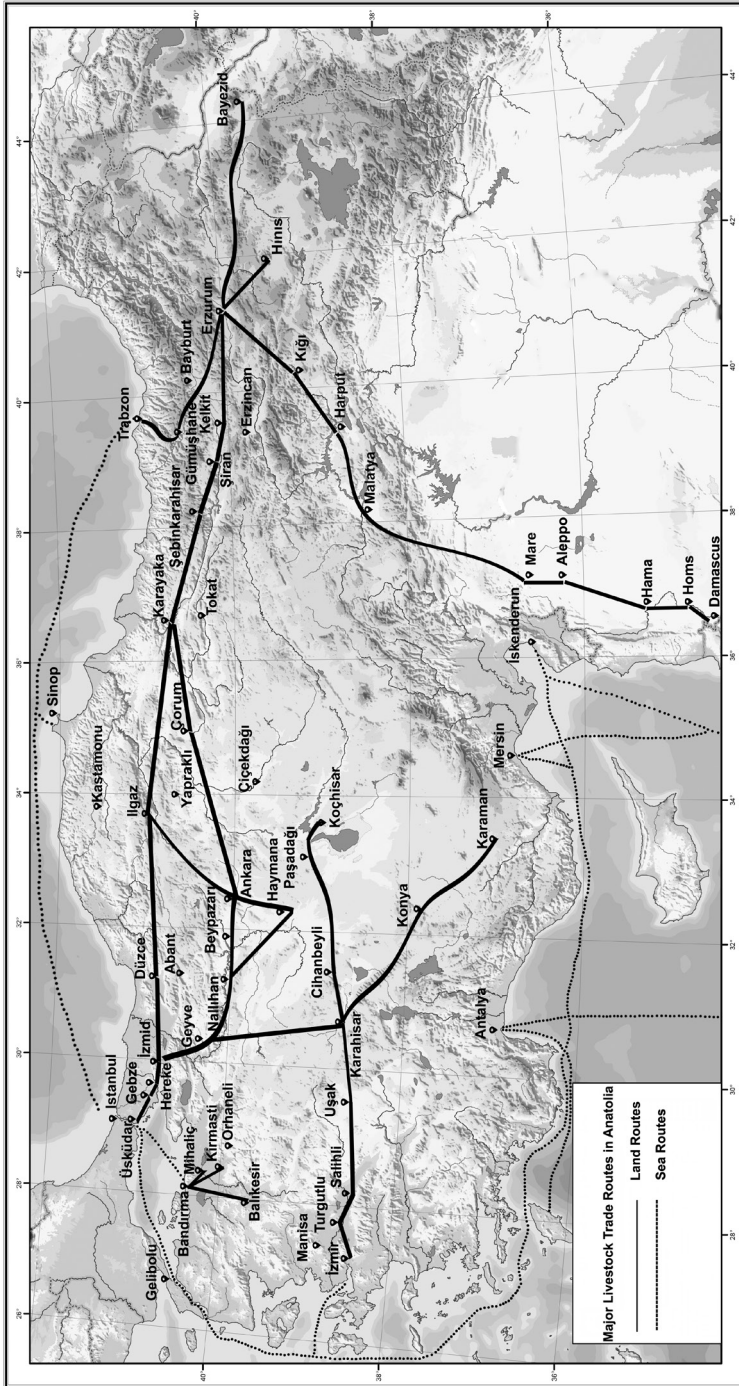
This book examines how different ecosystems, regional social and economic dynamics, and state policies shaped the livestock trade in late Ottoman Anatolia, as detailed in the five chapters that follow. While doing so, it takes the reader on a journey from the Caucasus to the Mediterranean, following the footprints of animals over a period of major social, political, demographic, environmental, and economic transformations for the empire. Chapter 2 focuses on central Anatolia (mainly Ankara and Konya provinces), a region that, thanks to Ottoman provisionist policies, had become one of the major suppliers of sheep to Istanbul by the early nineteenth century. The second half of the century brought multiple changes to the region. While the government abandoned its provisionist policies, considerable progress was made in the settlement of tribes. Moreover, famines, droughts, disease outbreaks, and locust invasions repeatedly struck Ankara and Konya. The chapter examines how state and local actors – tribal chiefs and commoners, livestock populations and merchants, large landholders, and small peasants – were affected by and responded to these developments. It argues that



their responses enabled the maintenance of a high level of exports from central Anatolia to Istanbul, İzmir, and Bursa.

Chapter 3 focuses on northeastern Anatolia, which by the early twentieth century was mostly covered by Erzurum province. It highlights the dynamic nature of Erzurum's trade networks that extended from the Caucasus in the east, to the Syrian provinces and Egypt in the south, and Istanbul in the west, showing how both their significance and organization changed from around the 1880s onward. Whereas in earlier decades, most of the sheep exports of this province went to Syrian cities and towns, Istanbul gradually became its major market. The chapter argues that this shift was influenced by various factors, including the Ottoman-Russian rivalry in the Black Sea, improvements in transportation technologies, and changes made by merchants in the organization of trade. Chapter 4 moves to Hüdavendigâr province, which stretched from the northwestern to central Anatolia. Despite the differences in ecosystems between the eastern and western parts of the province, both served as important centers for livestock raising and as stop-over points for non-local sheep merchants on their way to Istanbul, İzmir, and Bursa. Thanks to these factors, Hüdavendigâr experienced significant growth in sheep exports to the capital between the 1860s and 1900s. The chapter argues that this growth had several important consequences for the province. First, when combined with demographic factors – the influx of tens of thousands of refugees – it led to growing disputes over land among a diverse group of actors, including large landholders, local villagers, sheep merchants, and refugees. Second, it triggered increased state intervention and involvement in the spheres of economy and animal healthcare.

Chapter 5 analyses eastern Mediterranean ports as major gateways for Anatolian sheep and cattle. Among them, İzmir had conflicting functions: it was both a major export port for these animals and an important consumer of beef and mutton, with its dense and growing population. The chapter shows how government officials, merchants, and butchers negotiated and struggled with each other to respond to these conflicting demands. The development of İzmir's role as an export port was closely related to the increased demand from Egypt, which also affected several coastal towns and cities in southern Anatolia. Premier among them was İskenderun, with annual exports to Egypt amounting to about 100,000 sheep and cattle in the 1890s, followed, though far behind, by Mersin and Antalya. Although, as this chapter demonstrates, Istanbul had rivals, it maintained its position as the largest importer of sheep for slaughter until the end of the Ottoman Empire. Chapter 6 examines the organization and operation of the livestock and meat markets in the capital. It highlights their dynamic nature by showing how the deregulation and (re)regulation of the markets, along with the rise in fortunes of a few entrepreneurs and the decline of many small-scale butchers and merchants to the brink of bankruptcy, went hand in hand.



Map 1.1. Major Livestock Trade Routes in Anatolia