PAPER DETAILS

TITLE: Little Livestock Diseases In The Ottoman State And The Impact On Trade (1836-1914)

AUTHORS: Arzu Baykara Taskaya

PAGES: 425-471

ORIGINAL PDF URL: https://dergipark.org.tr/tr/download/article-file/4400071

Tarih ve Gelecek Dergisi, Aralık 2024, Cilt 10, Sayı 4 Journal of History and Future, December 2024, Volume 10, Issue 4



open access

creened turnitin 🗸

Araştırma Makalesi

Tarih&Gelecek

History&Future

Dr. Öğretim Üyesi
Arzu BAYKARA TAŞKAYA

Dumlupınar Üniversitesi, Sosyal
Bilimler Meslek Yüksekokulu, Dış
Ticaret Bölümü
arzu.bkaya@dpu.edu.tr

ORCID: https://orcid.org/0000-0002-1712-4881

Başvuruda bulundu. Kabul edildi. Applied Accepted

Eser Geçmişi / Article Past: 28/11/2024 14/12/2024

DOI: http://dx.doi.org/10.21551/jhf.1592680

Research Paper





Orjinal Makale / Orginal Paper

Little Livestock Diseases In The Ottoman State And The Impact On Trade (1836-1914)

Osmanlı Devleti'nde Küçükbaş Hayvan Hastalıkları ve Ticarete Etkisi (1836 -1914)

Abstract

In the Ottoman Empire, agriculture and animal husbandry was important economic activities of the state. Caring for farm animals has been important all over the world. Many diseases are still seen in ovine animals today. If we catagorize farm animals into two as cattle and sheep, we tried to examine the diseases of small cattle in our study. In this article, ten different diseases seen in cities in various provinces of the Ottoman Empire are explained. It is also reflected in the archive that sometimes several diseases are seen together and precautions are taken accordingly. In particular, it was feared that Cemre disease would be transmitted to humans and efforts were made to obtain a vaccine. The main source of our study is originated from the Presidential State Archives Ottoman Archive. In our article, the precautions have been taken against small ruminant diseases, how the diseases were treated, and what methods have been developed for this purpose are examined. The issue has been tried to be explained in detail with the examples reflected in the archive regarding the reflection of the effects of the diseases in these animals on the commercial structure. Veterinarians were on duty during diseases to ensure that animal sales continued and the commercial structure was affected as little as possible. Animal sales were tried to be carried out with clean documents (sehadetname) issued by the state. The most important factor that brought animal diseases to the agenda was the obstruction that would occur during the sale of animals. The

ATIF: TAŞKAYA, Arzu Baykara, "Osmanlı Devleti'nde Küçükbaş Hayvan Hastalıkları ve Ticarete Etkisi (1836 -1914)", *Tarih ve Gelecek Dergisi*, 10/4 (Aralık 2024), s. (425-471)

CITE: TAŞKAYA, Arzu Baykara, "Little Livestock Diseases In The Ottoman State And The Impact On Trade (1836-1914)", Journal of History and Future, 10/4 (December 2024), pp. (425-471)



Tarih ve Gelecek Dergisi, lisanslama politikası ile telif hakkının ve kullanıcı haklarının açık olmasını sağlar. Yazarlar dergide yayınlanan çalışmalarının telif hakkına sahiptirler ve çalışmaları CC BY-NC 4.0 lisansı altında yayımlanır. / Journal of History and Future ensures that copyright and user rights are open with its licensing policy. Author(s) publishing with the journal retain(s) the copyright to their work licensed under the CC BY-NC 4.0.

documents do not exactly mention the types of some of the achnam diseases. The article, in which the social and economic structure of the state is explained with animal husbandry, which is an important part of the urban history of the Ottoman Empire, also reveals how the trade was affected by the economic structure. An effort has been made to present the social and economic impact of achnam diseases in cities in many aspects.

Keywords: Ottoman Empire, Achnam Diseases, Treatment, Restrictions and Quarantine, Halkalı Agricultural and Veterinary School.

Öz

Osmanlı Devletinde tarım ve hayvancılık devletin önemli bir ekonomik faaliyetiydi. Çiftlik hayvanlarının bakımı tüm dünyada önemli olmuştur. Küçükbaş hayvanlarda günümüzde de birçok hastalık görülmektedir. Çiftlik hayvanlarını büyükbaş ve küçükbaş olarak ikiye ayırırsak çalışmamızda küçükbaş hayvan hastalıklarını incelemeye çalıştık. Bu makalede Osmanlı Devletinin çeşitli vilayetlerinde bulunan şehirlerde görülen on farklı küçükbaş hayvan hastalığı açıklanmıştır. Arşivde hayvan hastalıklarının bazen birkaç tanesinin birlikte görüldüğü durumlar da verilmiştir. Hastalıklara karşı yapılan müdahaleler ve önlemler, hastalıklarla mücadelede uygulanan tedavi metotları da arşive yansımıştır. Özellikle cemre hastalığının insanlara geçmesinden korkulmuş ve çeşitli yollarla yurtdışından aşı teminine gidilmiştir. Çalışmamızın asıl kaynağı Cumhurbaşkanlığı Devlet Arşivleri Başkanlığı Osmanlı Arşivi'nden oluşturulmuştur. Yazımızda küçükbaş hayvan hastalıklarına karşı alınan önlemler, hastalıklarla nasıl müdahale edildiği ve bu amaçla ne tür yöntemler geliştirildiği incelenmiştir. Bu hayvanlarda hastalıkların yarattığı etkinin ticari yapıya olan yansımasıyla alakalı arşive yansıyan örneklerle konu detaylı bir şekilde açıklanmaya çalışılmıştır. Hayvan satışlarının devam etmesi ve ticari yapının bu işten mümkün olduğu kadar daha az etkilenmesi için hastalıklarda baytarlar görev yapmıştır. Hayvan satışları devlet tarafından verilen şehadetname ile sürdürülmeye çalışılmıştır. Hayvan hastalıklarının gündeme gelmesinde en önemli etmen hayvan satışı sırasında ortaya çıkacak olan engellemelerdir. Evraklarda ağnam hastalıklarının bazılarının ne çeşitte olduğu ise verilmemiştir. Osmanlı Devleti'nin kent tarihinin önemli bir parçası olan hayvancılıkla, devletin sosyal ve ekonomik yapısının açıklandığı makale, aynı zamanda ekonomik yapının durumunu ticaretin de bu işten nasıl etkilendiğini ortaya koymaktadır. Küçükbaş hayvan hastalıklarının kentlerde yarattığı sosyal ve ekonomik etki birçok boyutuyla verilmeye gayret edilmiştir.

Anahtar kelimeler: Osmanlı Devleti , Ağnam Hastalıkları , Tedavi , Kordon Ve karantina, Halkalı Ziraat Ve Baytar Mektebi.



Introduction

ince the Ottoman Empire attached importance to agriculture and animal breeding as economic income, it paid special attention to these two activities. In fact, the care of farm animals has been an important activity all over the world ¹. In this sense, if we divide livestock into two as bakar (cattle, ox, buffalo, cow) and agnam (cattle, sheep, goat), we tried to examine small ruminant diseases in the study. The export of small ruminants from the east and the Balkans, especially to Istanbul, the center of the Ottoman Empire, caused these diseases to spread mostly from these regions. The introduction of livestock compensation for farmers during the Republican era, especially in the face of livestock deaths, was indeed an innovation to compensate for losses. Depending on the type of disease occurring in ovine animals, it was seen that many practices were carried out in the fight against these diseases in the country.

Fear of the danger of transmitting animal diseases to humans was another part of the story. We were able to follow from the documents that small ruminants were to be supplied to the hospital established at the Halkalı Baytar School for the Cemre disease in small ruminants and that a commission was established to produce a vaccine. Indeed, we saw from the documents that there were deaths. Throughout history, bovine plague has been one of the most costly animal diseases. The disease in cattle had spread rapidly through the virus, causing the deaths of large numbers of animals. The Plague of Bakari had been studied by many researchers². After the Plague of Bakari disease among cattle, which has been of great interest to researchers, the agnam diseases we are dealing with are based on the Ottoman Archives of the Presidency of the Republic of Turkey. We were also able to trace from the documents that various methods such as quarantine, vaccination and segregation were applied to animals in various sanjaks within the empire. The precautions taken against the "Agnam" disease, how the diseases were intervened and what kind of methods were developed for this purpose, and the effects of the diseases on the commercial structure have been tried to be explained in detail with the examples reflected in the archive. The most important factor that brought animal diseases to the agenda was the prevention of animal sales. In documents for some types of agnam diseases were not given in details. In this

¹ C.W Burkett, *The Farmer's Veterinarian*, (Newyork, Orange, Judd Campany, 1914).

See also: Mustafa Turan, "Osmanlıdan Cumhuriyete Vebayı Bakari Salgını ve Düşündürdükleri "Prof. Dr. Mustafa Keskin Armağanı: Türk Tarih ve Kültürü Araştırmaları, İdeal Kültür Yayıncılık, Edit: Remzi Kılıç, İstanbul, 2014, 977-993; Zeynel Özlü, "19.yy Sonlarında Osmanlı Devleti'nde Hazırlanan İki Risale: Vebayı Bakari ve Zatülcenb", Askeri Tarih Araştırmaları Dergisi, 12/23, (2014); 99-114; Mehmet Ak, "Osmanlı Devleti'nde Veba-i Bakarî (Sığır Vebası)", The Rinderpest in the Ottoman State OTAM, 39 /Bahar (2016), 215-240; Neşe Coşkun, "Osmanlı Devleti'nin Son Yüzyılında Bulaşıcı Hayvan Hastalıkları", Türk Kültürü ve Medeniyeti Araştırmaları Dergisi – Journal of Turkish Culture and Civilization Researches. 1 (2), (Aralık – December), (2020), 20-45; Kamuran Şimşek, "Osmanlı Devri Denizli'de Sığır Vebası: Vebâ-yı Bakarî", Belgi Dergisi, C.2, S.19, Pamukkale Üniversitesi Atatürk İlkeleri ve İnkılâp Tarihi Araştırma ve Uygulama Merkezi Yayını, Kış (2020)/I, 2068-2080; Seda Tan, "İstanbul ve Çevresinde Veba-yı Bakari (1886-1891)," Belleten, Aralık 2023, Cilt: 87/Sayı: 310,(2023), 1021-1057.

way, there are also many documents that were left as simply agnam disease.

Taxation was one of the most important elements in animal breeding Agnam tax can be found under various names in Islamic states. In Ottoman official records, it is referred to as *resm-i ganem*, *âdet-i ağnâm*. The Agnam tax was especially important for the nomadic Turkmen and Yoruk communities, which were largely sheep breeders ³. It is also true that animal diseases affected the economic structure. We even see people asking for a postponement of the taxes they had to pay due to livestock losses.

In order to ensure that the people of Istanbul were relieved from the shortage of meat, the butcher (celeb) tradesmen have long been asked to sell animals in June and July, known as the months of "kirçan". Kirça is also referred to as an animal disease. Sheep purchased from Edirne, Komotini, Komotini, Pazardzhik, Plovdiv, Silivri and various other towns are called *Baharkulu*. A document dated April 16, 1836 mentioned a disease in Baharkulu sheep. 10,000 heads (res) of agnam were requested to be sold to butchers and craftsmen ⁵

Some diseases were passed from animal to animal. The cases where rabies was transferred to the *agnams* are also reflected in the archive. In a document dated June 19, 1889 (20 Shawwal 1306) to the Ministry of Medicine, it was stated that a rabid dog had bitten three of Yorgi Girya's sheep in Çatalca and the situation was reported by the police. These sheep were slaughtered and buried with their skins in a deep well, the rabid dog was also killed, and it was requested to investigate whether the disease was transmitted to other animals. The situation was sent to the *Mutasarrıflık* of Çatalca to be notified by telegram and the situation was written to the district governor ⁶.

In the cordons to be established for the animals, the fees to be collected by the state in return for the inspection and the passage routes of the animals is regulated⁷. Another issue related to animal diseases is the rewarding of those who fight against the disease.⁸ In

Feridun Emecen,"Ağnam ", Türkiye Diyanet Vakfı İslâm Ansiklopedisi (*İstanbul : TDV* Yayınları, 1988 , 1/478-479.

Losses in sheep farming are usually caused by diseases. Among these diseases, parasitic diseases occupy a serious place and babesiosis in this group still continues to exist. However, losses from Babesia infections in small ruminants are often underestimated. Animals infected with the disease show deterioration in fleece quality, a significant decrease in meat and milk yields, and some cases result in death. Babesidae infection of sheep and goats requires the protection of sheep and goats from piroplasmosis and babesiosis of sheep and goats called "pain", "achik", "achima", "malaria", "kırça" among the people in Turkey. Selin Hacılarlıoğlu,-Tülin Karagenç "Koyun Babesiosisi", Animal Health Prod and Hyg 4(1), (2015), 373.

⁵ BOA, *HAT* / 680 - 33164. 16 April 1836.

⁶ BOA, DH.MKT. / 1629 – 96. 19 June 1889.

Osman Nuri Ergin, "*Mecelle-i Umur- ı Belediye* ,Cilt 6, (İstanbul: İstanbul Büyükşehir Belediyesi Yayınları, 1995),3331. See Also: 18 Muharrem 1332(1916) Zabıta-i Sıhhıyye-i Hayvaniyye Talimatnamesi, 3350.

It was not uncommon for the state to reward those who proved useful in state service in different ways. A medal was a gift of reward and honor, usually made of gold, silver, copper or nickel, and given as a one-off to commemorate an achievement that should not be forgotten .İbrahim Artuk ,"Madalya , Türkiye Diyanet Vakfı İslâm Ansiklopedisi ,(Ankara: TDV Yayınları, 2003), 27/301-302). An Nişan was a kind of medallion, usually decorated with ornaments and precious stones, awarded by the state for outstanding service .İbrahim Artuk," Nişan", *Türkiye Diyanet Vakfı İslâm Ansiklopedisi ,(İstanbul :TDV Yayınları, 2007),33/154-156*.

the document dated August 22, 1889 (25 Zilhicce 1306) written to the Seraskeriye, it was stated that great success was achieved in the elimination of cattle plague and sheep disease that emerged in Gazaldin (?) town and in the towns of Sohterus and Kumbergos in the vicinity of Küçükçekmece. It was requested that the sanitary cordon be lifted as there was no trace of the disease that had appeared in the Agnam. Upon the reports given by Besim Bey, who was in charge of the affairs of the inhabitants of the villages, and his lieutenant Hakkı Efendi and Haydar Bey, the Baytar Inspector, the situation was conveyed to the necessary places; a document was sent from Mutasarrıflık of Çatalca for the rewarding of Haydar Bey, who worked hard and benefited in this field. The Ministry of Medicine proposed to award prizes to those who had shown their usefulness in the Sanjak of Izmid for their efforts to suppress the disease and the measures taken against it ⁹.

In the XIXth century, we see that laws on animal diseases were also enforced within the state, In the correspondence dated June 3, 1890 (14 Sevval 1307) with the Ministry of Internal Affairs and the Ministry of Medicine regarding the necessary scientific measures to prevent the Agnam disease in Biga Sanjak, the necessary action was requested to be taken, and in the mazbat written in the Tanzimat Department, the suppression of the diseases was requested. A law on animal diseases was also on the agenda. In accordance with the instructions to be issued, it was requested to immediately appoint the necessary baytars, and to send a copy of the instructions to the Seraskeriye and to various locations with animal diseases as a copy with instructions. It was also emphasized to appoint a medical officer to the places where there was no medical officer, and to send a ruler and a copy of it to the Ministry of Medicine and the Mutasarrıf of Biga to the places where there was a disease, based on the adequate possibilities and suitability of the disease. When such a disease emerged, measures were to be taken immediately. In addition, the Ministry of Medicine was instructed to send to the Sublime Porte a law on physicians and medical officers, adapted from the laws and measures applicable in foreign countries and taking into account the needs of the country in terms of its state and position. In the content of the aforementioned instruction sent to the Nezareti of Internal Affairs, it was stated how to proceed in case of damage to one or more of the sheep in the flock; that the work could be terminated if it was in the inspection period for a long time, and that if the transaction was carried out in accordance with the law, the follow-up of the agnam according to the situation in Article 4. It was requested that the matter be decided and the result of the majlis review law (meclisi tedkikat-ı şerriye) be sent to be notified .¹⁰.

There are also cases where diseases are only described as sheep diseases in the documents. In the document dated January 1, 1893 (12 Cemazeyilahir 1310) written to

⁹ BOA, *DH.MKT.* / 1650 – 87. 22 August 1889.

BOA, MV. / 54 – 35. 14 Şevval 1307. In the law that came into force in 1875, it was stated that veterinarians would work in the province and district governorships. 9 Zilhicce 1292 tarihli Memaliki Şahanede istihdam olunacak Mülkiye Baytarları hakkında Nizmaname Ergin, Mecelle-i Umur- 1 Belediye, 3317). In the face of the terrible ravages of cattle plague, in 1893, the Regulation on the Control of Animals was adopted. Ergin, Mecelle-i Umur- 1 Belediye, 3328). With its inadequacy, "1913 Zabita-yı Sıhhıye-yi Hayvaniye Kanunu Muvakatı" was enacted. (Nihal Erk., "Tarihte Önemli Sığır Vebası Salgınları ve 1920'ye Kadar Memleketimizdeki Durumu", Ankara Üniversitesi Veteriner Fakültesi Dergisi, C 10/ S. 3-4, Ankara (1963), 230-231.

the General Secretariat of Mekatib-i Askeriye-yi Şahane (Imperial School of Medicine in Ottoman Empire), the documents of the Baytar Commission consisting of various baytars and doctors (etibba) established for the diagnosis of the sheep disease that broke out in some accidents of Crete (Heraklion and Isfakiye) were sent. Following the necessary examinations carried out by the commission established in this way, it was stated in the report given by the province's Baytar that there were appropriate scientific conditions for the diagnosis and that only the report of the Baytar Captain who traveled and inspected the Sanjak of Heraklion was taken as testimony. In the report, it was reported that the work was reported and that the problem could be eliminated, and that investigations had begun in the province and the region¹¹.

Among the archival documents, there are also documents related to the mass purchase of sheep from farms due to diseases. In the document prepared by the head of the Imperial Office of Real Estate, it was requested to keep a record of the income (irad) of the price of one head (res) of sheep due to the disease that broke out among the sheep brought from Mihaliç Farm. In the document dated February 23, 1904 (February 10, 1319), it was stated that 76 lira was given for animals for one time ¹².

1- Agnam Diseases in the Ottoman Empire

An important point that we realise while dealing with the diseases one by one is the fact that these diseases continue today¹³. Small ruminant diseases in the Ottoman Empire were reflected in the documents in terms of the solutions to be applied in the areas where they originated.

Brusellosis (Brucellosis) Malta Fever" or "Bahr-1 Sefid (Eyalet of Archipalego) Fever

Brucellosis, also known as recurrent typhoid fever, typhoid-malaria fever, Mediterranean fever, coronavirus fever, Maltese fever, Maltese fever, Neapolitan fever, Cyprus fever, Crimean fever, rock fever, Gibraltar fever and corps fever, is a zoonosis caused by one of the species in the genus Brucella (Brucella melitensis, B. abortus, B. suis, B. canis, B. ovis, B. neotomae, B. ceti and B. pinnipediae) in the genus Brucella ¹⁴.

We also learn that due to this disease, the Ottoman Empire purchased animal and dairy products from the island of Malta. We observe that the sale of meat and mandra products from the island of Malta to Istanbul was banned twice due to Maltese fever. In a document dated May 10, 1909 (19 Rabiulahir 1327) written to the Ministry of Foreign Affairs, it

¹¹ BOA, DH.MKT. 2037 – 92. 1 January 1893.

¹² BOA, ML.EEM. 464 – 17. 23 February 1904.

Hüseyin Erdem - Emine Çiftçi - Kürşat Işık - M. Ümit Yorgancılar, "Kuzu ve Oğlak Kayıplarının Önlenmesinde Koyun Keçi Sağlığı ve Yetiştiriciliği , (Ankara : Akademisyen Kitabevi , 2021).

Sabri Serinken - Ş. Memduh, Say "Brucellosis Malta Humması Dalgalı Humma, (İzmir: Cumhuriyet Matbaası, 1947; Selim Öncel," Brusella Enfeksiyonları: Değerlendirme ve Yönetim, Kocaeli Üniversitesi Sağlık Bilimleri Dergisi, Eylül Cilt 2, Sayı 3,(2016), 25-30; Noyan "Abdülkadir "Malta Humması (Brüselloz) (Ankara Üniversitesi Tıp Fakültesi Mecmuası Vol.XVI, Sayı.II, Ankara Üniversitesi, Ankara "Ayrıbasım, (1963),91-96.



was requested that milk, cheese and meat made from Maltese goats, sheep and various animals that carry the germ of the disease called Bahr-i Sefid fever in Malta be banned from entering Istanbul. The documents received by the Ministry of Imperial School of Medicine were sent to the Ministry of Foreign Affairs with a memorandum dated May 2, 1909 (April 19, 1325) upon the notification made by the decision of the Council of Ministers. It was requested to conduct the necessary research on this situation and to give an opinion. The notification requested a ban on the import of animals into Istanbul ¹⁵. Yet another document was written by the Minister of Foreign Affairs dated April 17, 1911 (April 4, 1327). The sale of milk, cheese and meat from sheep, goats and various domestic animals from Malta that carry the fever germs called "Malta Fever" or "Bahr-ı Sefid Fever" was banned. Since it would be necessary to notify the foreign embassies of the situation, it was reported that the necessary information about what was carried on the ships to be exported should be written to the Embassy in Malta, since this would cause the merchants engaged in trade to be prevented in this way¹⁶.

Malta Fever was brought to the fore with the prohibition of small cattle and dairy products made from them to be shipped to Istanbul from the island of Malta, preventing the entry of products into the capital.

Anthrax Disease (Cemre-yi Bacteria)¹⁷

Cemre, (Anthrax) is a zoonosis transmitted from grass-eating animals to humans¹⁸. This disease is seen especially in rural areas in our country, especially in livestock breeders. Skin anthrax is the most common ¹⁹. The archive often reflects diseases on farms. Another issue related to Cemre's disease is the vaccination studies carried out for this disease. We have examined the practices carried out at Halkalı Agriculture and Baytar School under a separate heading.

It was reported that animals in some farms in and around Istanbul were infected with cemre disease. In the document dated December 25, 1890 (13 Cemazeyilevvel 1308) written to the Ministry of Medicine, it was stated that the Cemre disease seen in the animals in Korles farms in Küçükçekmece was prevented by sanitary measures and that the information that some animals were buried was conveyed to the city administration²⁰. In the document dated August-September 1896 (Gurre & Rebiülahir 1314) written to the Ministry of Foreign Affairs by Mr. Salim Bey, veterinary surgeon of the Forestry and Mining and Agricultural, it was reported that the news of the emergence of bovine plague transmitted from lambs in Kuleli and Nakkaş farms was given to newspapers. With the approval given by the Austrian Embassy, it was asked whether there was a disease in these places or what

¹⁵ BOA, *BEO*, *3544* – *265798*. *2 May 1909*.

¹⁶ BOA, HR.TH.. / 375 -6. 17 April 1911.

A Scorpio., - T. E .Blank., - W. A Day. - D. J. Chabot , "Anthrax vaccines: Pasteur to the present", ,"Cellular and Molecular Life Sciences, Cell. Mol. Life Sci. 63 (2006) 2237–2248.

For these types of diseases, Hugo Broun-Ziya Öktem , Mikrobiyoloji ve SalgInlar Bilgisi , İstanbul: İsmail Akgün Basımevi, İstanbul Üniversitesi Yayınları, (1944), 23 .

¹⁹ Aziz Öğütlü, "Şarbon "Journal of Experimental and Clinical Medicine , J. Exp. Clin. Med,(2012), 29:155.

²⁰ BOA, *DH.MKT*. 1795 – 55. 25 December 1890.

kind of precautions were taken. The situation was conveyed in the document sent from the Ministry of Commerce and Public Works and then forwarded to the Ministry. It was written by the committee of agriculture and science that although the lambs in the mentioned farms were infected with the disease, the disease was not plague of bacari, but a mild form of cemre disease and that it was eliminated with the measures taken without infecting the environment²¹. In a document dated January 18, 1906 (January 5, 1321), news of a disease was received from another farm. The disease was said to affect all livestock. Mihaliç Imperial Farm Office reported that the "cemre-yi bacteriye" disease in land cattle started in January, and although forty days had passed after the death of two head of animals, there was no sign of any disease. The cause of the disease has been attributed to different factors. It was reported that animals perished due to the severe drought last summer and fall, and that the bodies of all animals, both small and large, were slightly weakened because they could not eat the autumn meadows. It was reported that the severe winter season affected not only the farms but also the people with a few animals, and that all animal owners suffered losses from this, and that the animal disease that occurred was eliminated²².

The archive also contains documents on the transmission of cemre disease from animals to humans. In the document dated August 31, 1906 (11 Rajab 1324), it was reported that the cemre disease, which appeared in animals such as black cattle and sheep, was transmitted to humans through flies and vaccines; such incidents affected two people in Edremit, one healthy and one sick, and a two-year-old Christian child died due to this disease. A telegram was sent to the province that the disease was prevented due to the vaccination (mountain surgery) given to a person infected with the disease, and that the necessary scientific measures would be taken to eliminate the disease ²³.

Since Cemre's disease can also be transmitted to humans, it was seen that this situation was tried to be prevented by vaccinating animals. From the moment the disease broke out, measures were taken to combat the disease and the disease was fought Animal diseases were also monitored through foreign embassies. It was also thought that the Cemre was caused by seasonal factors.

Smallpox (Cüdari-yi Ağnam)

The history of sheep and goat smallpox is known to be as old as human smallpox. The disease has been reported in every region of the world where sheep and goat breeding is practiced. Today, although the disease has disappeared in European countries, it continues to exist in many Asian and African countries, including our country²⁴. In the Ottoman Empire, vaccines were used in the fight against this disease. This disease, which broke out in different provinces, was tried to be controlled by veterinary surgeons and the sale of sick animals was prohibited. The earliest smallpox case in the documents is in Thessaloniki.

In the document dated May 27, 1875 (May 15, 1291) written from Cuma District

²¹ BOA, HR.TH. 179 – 82.

²² BOA, ML.EEM. 500 – 75. 18 January 1906.

²³ BOA, DH.MKT. 1113 – 71. 31 August 1906.

İbrahim Sözdutmaz -Hakan Bulut," Koyun-Keçi Çiçeği Hastalığının Polimeraz Zincir Reaksiyonu ile Tanısında Farklı Klinik Örneklerin Kullanımı" Atatürk Üniversitesi Vet. Bil. Derg.; 5 (3): (2010), 113.

Governorate in Thessaloniki, it was requested that the cavalry doctor give a recipe to the government for the treatment of smallpox in lambs in Cuma and that the sheep owners be told to take the necessary actions according to this recipe ²⁵. In this way, it was tried to ensure the disappearance of the disease.

Animal quarantines were another measure taken in response to diseases. In the document dated December 2, 1887 (16 Rabiulevvel 1305) written to the Mutasarrıflık of Kaza-i Erbaa, it was deemed necessary to quarantine the sheep in the vicinity of Burgaz Village for twenty days upon the report of the medical inspector who came for the treatment of sheep with smallpox. In the reply received from the city administration for the necessary action, it was stated that the matter had been written to the necessary places and sent to the Ministry of Health. It was stated that the situation was reported to the Ministry of Health and that the measures taken were found to be appropriate ²⁶.

Smallpox was mostly concentrated in the Balkan provinces of the Ottoman Empire. In a document dated November 5, 1888 (10 Rabiulevvel 1306) written to the Ministry of Commerce and Nafia, it was written that all four flocks of sheep sent from Rumelia to Dursunköy and Tirkeşe had smallpox. The City Administration Veterinary Inspectorate received a telegram for these animals from the Mutasarrif of Catalca. In the response of the Amirate to the telegram, it was stated that since the inspector was on duty in Sile, someone from the School of Medicine should be brought there. In addition, since there was an animal disease in the village of Haraççı, it was requested that a doctor be sent to this region ²⁷. The situation was revealed in a document dated November 14, 1888 (10 Rabiulevvel 1306) written to the city administration for the examination of diseased sheep flocks brought from Rumelia to be shipped to Dersaadet (Gate of Bliss). Information flowed through the reports given by Haydar Bey, the veterinary inspector. Smallpox broke out in 4 herds that came from Sarki, Province of Rumelia, and were brought to Dursunbey and Tirkese. It was stated that 300 heads (res) of this agnam were bought by the butcher Kestanebekli Küçük Apostol in Beyoğlu and taken to Dersaadet, and that some of the diseased animals were found on the road because the remaining animals were more than 10 herds. In order to prevent the sale of these, it was necessary to designate points in certain areas in Eğrikapı, Ortakyusuyla and Filköprüsü and to keep them there. A copy of the telegram received from Mutasarrıflik of Catalca was sent and it was stated that the reason for the cancellation of the sale of diseased animals was written to Edirne Province by telegram. It was requested by the amirate to take the necessary actions immediately and not to allow the sale of the animals if there were any buyers²⁸. In the document dated 11 December 1888 (7 Rabiulahir 1306) written to Mutasarrıflik of Catalca, it was stated that veterinary surgeon were sent to Catalca and that the required number of veterinary surgeon should be sent; the situation was reported to the Ministry of Commerce and Public Works. It was necessary for the supervising medical veterinarian, Mahmut Ali Bey, to come to Çatalca. ²⁹.

²⁵ BOA, C..İKTS / 17 – 826. 27 May 1875.

²⁶ BOA, *DH.MKT.* / 1467 – 55. 2 December 1887.

²⁷ BOA, *DH.MKT.* / 1564 – 50. 5 November 1888.

²⁸ BOA, DH.MKT. / 1564 – 38. 11 December 1888.

²⁹ BOA, *DH.MKT.* / 1573 – 85. 11 December 1888.

In the document dated January 13, 1890 (21 Cemazielevvel 1307) from the Edirne Province, it was stated that smallpox was seen in the sheep of Police village of Evreşe sub-district of Gelibolu Sanjak and 125 sheep perished. The Mutasarrıflıkof Gallipoli was asked to take the necessary measures, and a telegram was sent to the province to notify the mutasarrıflık for the complete elimination of the disease ³⁰.

Since the disease was contagious with its risky dimension, it caused the implementation of vaccination or cord method. In the document dated August 10, 1890 (23 Dhu al-Hijjah 1307) written to the Ministry of Interior, it was stated that smallpox was seen in some sheep flocks in Draç³¹ and necessary measures were taken to prevent the disease from infecting other animals. In some districts and towns in Izmir, since it would not be possible to cordon off the area where the disease continues and to prevent animal exports, the Zaptiah Sanitary Police were asked to take action in accordance with the health measures (Sanitiz kaidesi)³² It was stated that the details of the work prohibiting the export of cattle transportation (baccaria livestock) from the Izmir Pier were sent by telegram dated February 20, 1890 (February 8, 1305). In the reply received from the Ministry of Medicine, it was deemed necessary to cordon off the diseased areas. Since the reason for this situation was unknown, it was emphasized that it is possible to take the necessary measures against any situation according to the cordon procedure; it is necessary to take the work under control and vaccinate the animals. If necessary, permission was requested to only allow butchering from those areas that were not affected by the disease. It was stated that the report from the veterinary commission regarding the permission to export animals and its details had been sent. In the document dated August 7, 1890 (July 26, 1306), it was reported from the Governorate of Iskodra that quarantine measures were applied to the mentioned herds³³.

In addition to the problems in the diagnosis of smallpox, which intensified in the Balkans, it was also a problem to cover the travelling expenses of the officials travelling there. Another document written by the province of Monastir also reported to take precautions against smallpox. In the document dated May 17, 1891 (8 Safer 1308), it was reported that there was smallpox in sheep and goats and bovine plague in cattle in the Thessalian Peninsula, and it was requested to have a number of veterinary surgeon in Alasonya. It was reported that the animals coming to the Ottoman Empire should be examined. With the number 8 memorandum written to the Ministry of Health, it was stated that there was no disease in small and large cattle in Yenişehir (Greece) and it was requested to do what was necessary accordingly ³⁴. Another Balkan town is the district of Rupchoz in Bulgaria. In a document dated November 16, 1892 (25 Rebiulahir 1310) written to the Ministry of Imperial School of Medicine it was reported on November 9, 1892 (28 teşrini evvel 1308) that the animal disease in a village of Rupçoz district was smallpox. It was delivered in a telegram received from the province, where the import of sick sheep was banned by

³⁰ BOA, DH.MKT. 1689 - 58. 13 January 1890.

Draç is an important port city on the Adriatic coast in Albania. Machiel Kiel, "Draç", Türkiye Diyanet 31 Vakfı İslâm Ansiklopedisi (İstanbul: TDV Yayınları, 1994), 9/522-524.

³² Sanitation is making it fit for health.

³³ BOA, DH.MKT. 1749 -51. 7 August 1890.

BOA, DH.MKT. 1833 - 34. 17 May 1891. 34



the order of the Edirne governorship, due to the outbreak of the disease in the Nastak and Rolet villages. 35. In another dated document sent eight days later to the Ministry of General Military Academy, it was stated that the disease was being treated and the telegram dated November 15, 1892 (3 Tesrini sani 1308) received from the central province was sent. A telegram was sent that the mentioned disease was on the way out and that the disease in question was on the verge of remission ³⁶. The telegram dated December 9, 1892 (27 Teşrini sani 1308) from the Province of Edirne, addressed to the Ministry of General Military Academy was sent. Although sheep disease emerged, its spread was prevented by taking measures ³⁷. In the document sent a week later, it was reported to the Ministry of General Military Academy that an inspector was sent to the region for an investigation since the necessary measures were not taken against the sheep disease that emerged. In the report of the veterinary surgeon commission, it was emphasized that although a veterinary inspector was immediately sent to the region, the necessary information was given upon the reports issued, the work was not taken care of in this respect, and it was emphasized that taking scientific measures should not be postponed. Although it was necessary to pay attention to the disease in the examination, the inspector was asked to come immediately and report the situation as the examinations would be carried out. 38. It was stated that the memorandum dated 15 November 1892 (3 Teşrini Sani 1308) was sent based on the telegram dated 11 December 1892 (21 Cemazevilelevel 1310) written to the Ministry of General Military Academy. It was reported in a telegram to the province that there were animal casualties but the disease was slowly decreasing 39. In the document dated January 27, 1893 (9 Rajab 1310), written to the Edirne Province, it was requested that the soldiers of the rank be paid a daily wage of one lira each and a travel allowance, provided that they arrived within a week during the examination at the scene of the disease, and that the work be collected from the provincial municipality. In addition to these two officers, it was decided to appoint the member of the veterinary commission and the District Governor of Hygiene General Veterinary Inspector Hüsnü and the district governor Mehmet Bey, a member of the Serasekier animal inspection commission. It was stated that it would be appropriate to declare daily wages and travel allowances for the expenses to be incurred, and to give allowances to Mr. Hüsnü and Mehmet, who were sent to inspect the treatment applied at the end of the work. 40.

We see that they want to prevent situations that cause disruption of trade due to illness. Bulgaria prevented the passage of sheep shipped from Rumelia to Dersaadet (Gate of Felicity), on the grounds of disease. Thereupon, it was requested that the animals be shipped via Thessaloniki and the veterinary surgeon inspectors who made hesitant statements in their reports on the subject were warned. In the written reply sent from Muhde Province to the Ministry of Commerce and Public Works, in the certificate sent from the meetings

³⁵ BOA, DH.MKT. 2020 – 92. 9 November 1892.

³⁶ BOA, DH.MKT. 2024 - 135. 15 November 1892.

³⁷ BOA, *DH.MKT.* 2019 – 8. 9 December 1892.

³⁸ BOA, DH.MKT. 2032 – 9. 9 December 1892.

³⁹ BOA, DH.MKT. 2030 – 18. 11 December 1892.

⁴⁰ BOA, DH.MKT. 2046 – 25. 27 January 1893.

with the Veterinary Commission, it was stated that according to the provincial veterinary inspector report, there was no disease in the animals, but smallpox appeared in the Karatuh district of Thessaloniki Province in four villages of the district for 5-6 months and ended within two months. It was clear from the information provided by the owners about the animals in the area that no further illnesses had occurred since then. A document was sent on February 13, 1892 (14 Recep 1309) about not preventing the sale of animals 41. Another obstruction was a document dated February 20, 1904, written to the city captains. It was reported that the Amirate Sanitary Veterinary Office prevented the animals from being taken to Gate of Felicity because smallpox was detected in the flock of sheep collected by Arif Agha from Shumen and Pleven and brought to Varna. 42. No other documents related to this issue were sent.

We also see that the sales of agnam to the Ottoman Empire were postponed due to illnesses. In the document dated January 15, 1893 (26 Cemazielahir 1310) written to the Kosovo Province, it was planned that the medical inspector to be sent to take measures due to the smallpox that appeared in sheep in Palanka would be paid twice. It was stated that this fee, which amounts to 2000 kuruş, would be reported in the reply written to the Ministry of Commerce and Public Works in the telegram dated 1 December 1892 (19 Teşrini sani 1308). In the document received by the Ministry, it was requested that a remittance of 2000 kurus be responded to immediately upon receipt of the document 43. In the document dated February 25, 1893 (8 Şaban 1310) written to the Ministry of General Military Academy, it was stated that smallpox had broken out in the sheep in the Koçana and Palanka accidents and Bilan (Belen) town, and although it was tried to be suppressed with vaccines, there was a cattle disease in Serbia and sheep disease in Bulgaria, so the sale of animals from these countries was prohibited 44. This letter was sent to the Ministry in response to a letter from the Kosovo Province, and it was requested that the necessary measures be continued until the report given by the veterinary inspector was sent. According to the report of the Veterinary Surgeon Commission, the smallpox that appeared in the aforementioned places was prevented by vaccination, and although it was understood that some kind of disease appeared in the black cattle in Erküp and Silifke and Kurşunlu Kazas of Serbia, it was stated that the sale of black cattle to be brought here should be prohibited in order to prevent the spread of this disease. In a telegram sent to the province, it was requested that animals should not be passed through unless there was a health record (sanitary certificate) given to the animals. No cattle were transported from Bulgaria to the other side, and in about 20 districts of Bulgaria, especially in the aforementioned districts, it was reported that the cattle were sick, and it was requested to prohibit the transportation of cattle.

In some of the documents, it is also seen that animal diseases were a misunderstanding. In the document dated 18 March 1893 (6 March 1309) written to the Ministry of General Military Academy, the province was notified that smallpox had been detected among some sheep in Karapınar Barracks in Komotini and in the towns on the road. Upon this, it was

⁴¹ BOA, DH.MKT. 1922 – 36. 13 February 1892.

⁴² BOA, HR.SFR.04.. 595 – 11. 20 February 1904.

BOA, DH.MKT. 2042 - 109. 1 December 1892. 43

BOA, DH.MKT. 2055 - 93. 25 February 1893. 44



written that no such sheep disease was found on the road and in the barracks during the examinations carried out by the officer sent here ⁴⁵.

After the emergence of the diseases, the state was notified to the state and the state took the provincial centre as the competent responsibility authority. The measures taken by the Thessaloniki Veterinary Surgeon Inspector were reported in the document dated 26 March 1893 (8 Ramadan 1310). It was stated that the measures taken against smallpox in sheep in Köprülü and some towns and villages consisted of sending the census tables containing the existing animals and those who perished due to the disease. In the documents written to the Ministry of Internal Affairs, it was reported that the smallpox vaccine was applied, efforts were made to prevent the spread of the disease to the surrounding towns, and the disease was under control 46. It was reported that the scientific measures covered 10 per cent of the existing number of livestock, and that the office of the Thessaloniki Veterinary Surgeon Inspector was attached to the Thessaloniki Province since it was not independent. It was stated that the application authority here was the Ministry of Agriculture and Public Workst and the report was asked to the province. It was requested to take the measures to specified in the reports of the science department as soon as possible without delay. It was reported that complaints to the Ministry of Internal Affairs were open due to the lack of implementation. On the occasion of the submission of the annual tables, it was stated that it was not necessary to have them approved by the supervision; in fact, the transactions would be sent to the province and the supervision, since they were authorised in the communication. Again, since there would be no other documents other than the science report, the situation was written to the province and the Ministry of Internal Affairs ⁴⁷. Another case of smallpox was in Edirne. In the report of the provincial Veterinary Surgeon Inspector dated 18 July 1893 (6 July 1309), it was reported that scientific measures should be taken for the cattle plague that appeared in Burine and Yakaköy villages of Ortaköy and Dedeağaç districts of Edirne. On Monday, it was reported that the cavalryman of Ustuyan Yorgi in Burime District had smallpox, and while he was going to be vaccinated (surgery-i telki), he was informed that also four cavalrymen in the town were also infected, and all of the cavalrymen were vaccinated. It was also requested to take the necessary measures to prevent the spread of the disease in sheep and goats ⁴⁸. It was stated that the medical intervention was carried out and that the documents given by the Veterinary Surgeon Commission for taking the necessary measures were sent to the the Ministry of Internal Affairs with the decision of the mülkiye tıbbiye meclisi (civil medicine council) and sıhhiye-yi umum*i*(the general health department 49.

The state's response to animal diseases was rapid; the state determined the control centres established at certain points. It was written to the Ministry of Internal Affairs on 4 December 1893 (25 Cemazeyilevvel 1311), stating that the documents given from the Kapı Kethüda due to smallpox in Bulgaria, Eastern Rumelia and Edirne were sent to

⁴⁵ BOA, *DH.MKT.* 6 – 45. 18 March 1893.

⁴⁶ BOA, DH.MKT. 5 - 69 -3. 26 March 1893.

⁴⁷ BOA, *DH.MKT.* 5 - 69 -4.

⁴⁸ BOA, *DH.MKT.*: 95 – 48. 18 July 1893.

⁴⁹ BOA, *DH.MKT. 95 - 48-5*.

Civilian School of Medicine (Mekteb-i Tıbbiye-i Mülkiye) and Public Sanitary (Sıhhiyeyi Umumiye). A document from the commission was sent for both the measures to be taken and for the necessary actions to be taken⁵⁰. In the documents written to the province of Edirne, a letter dated 24 November 1893 (12 Teşrini Sani 1309) was sent from the Mutasarriflik of Catalca and the situation was reported to the necessary places 51. In the document written to the Ministry of Internal Affairs, it was stated that the inspections of the sheep to be sent from these places were carried out by the artillery regiment veterinary officer Hakkı Efendi in Çorlu, and with the approach of the winter season, the animals to be sent to Gate of Felicity, would be transported by train. The document dated 11 December 1893 (2 Cemazielahir 1311), sent by Hakkı Efendi to the Çatalca command, stated that the examination would take place in Hadımköy and in Ağunlar. It was requested that the matter be immediately forwarded to the city administration and Haydar Bey, Veterinary Surgeon Inspector of Çatalca Sanjak. Since it was deemed appropriate to carry out the examination at the Tozalak Farm in Catalca, which was important enough to require quarantine, it was decided to take action accordingly and the situation was notified to the province on 25 December 1893 (16 Cemazielahir 1311) 52.

Another element reflected in the documents is the statistical tables kept on animals. In the document dated 7 February 1894 (1 Şaban 1311) written to the Ministry of Forestry and Mineral Agriculture, it was reported that the statistical tables indicating the amount of animals that perished due to smallpox in sheep in Crete in the months of July, August and September in 1309 Rumi year were sent. It was stated that the document was delivered to the Ministry of Imperial School of Medicine on 1 December 1893 (19 Kanuni Sani 1309) to be recorded in the book kept by the Ministry⁵³.

We see that the necessary health measures were applied for the diseases that emerged in the Balkans. In the document dated 8 April 1899 (9 Kanunievvel 1316), it was stated that some sheep flocks in Salibakkal Neighbourhood of Kavaya district of Kosovo Province had smallpox and the situation was reported to the Ministry of Forestry, Mining and Agriculture to take the necessary measures. The necessary telegram was sent to the Veterinary Surgeon Inspector to take the necessary measures and he was asked to take the necessary steps. ⁵⁴.

In the document dated 23 August 1901 (8 Cemazeyilevvel 1319) written to the Ministry of Forestry, Mines and Agriculture, it was stated that there was smallpox in black cattle and mild smallpox in sheep in the towns and villages of Shtib and that the report given for this case was sent by the first mail. Information was given in the telegram sent by Shtib municipal veterinary captain Ziva Efendi. In order to prevent the spread of the disease around, it was requested that sanitary practices be carried out, serious measures be taken before the spread of the disease and the results be reported to the province 55.

⁵⁰ BOA, DH.MKT. 118 - 8 - 6. 4 December 1893 .

BOA, DH.MKT. 118 - 8 -7. 24 November 1893. 51

⁵² BOA, DH.MKT. 118 - 8 -8. 25 December 1893.

⁵³ BOA, DH.MKT: 182 – 37. 1 December 1893.

⁵⁴ BOA, DH.MKT. 2153 - 1. 8 April 1899.

BOA, DH.MKT 2525 – 90. 23 August 1901. 55



The most important treatment for smallpox in animals was vaccination. It was tried to prevent the spread of smallpox, which emerged in various regions, and Veterinary Surgeons, who were state officials, were also used in this field. Smallpox was generally concentrated in the lands of the Ottoman Empire in the Balkans. Although we see that the provincial centers were implementing various health measures with serious efforts, it is reflected in the documents that it was difficult to provide the travel expenses of the civil servants who would work in this job.

Liver Rot (Dystomatosis)

The disease, which is usually seen in late summer and autumn, can cause death when left untreated. Due to the parasites, also known as liver fluke, millions of animals and their products are destroyed every year due to the lack of necessary remedies. Not only in Turkey but all over the world, the damage caused by parasites, especially lung pinworms, is great and researchers are working to prevent them ⁵⁶.

The first document we have access to about butterfly disease in the Ottoman Empire is about the slaughter of animals due to this disease in farms. In the document dated 29 August 1816 (5 Şevval 1231) written from Darüssaade Ağa Hafız İsa Ağa to Elhac İbrahim Caliph, the landlord was asked to separate all the animals in his farm from the milking ones and keep the milkers on the farm. It was reported that the sheep infected by Liver Rot disease should be counted and the sheep should be delivered to the butcher accompanied by shepherds. It was stated that what should be done in this regard was clear and that everyone should be busy with their own duties and should not interfere in the affairs of other ayans and feudal lords ⁵⁷.

Sometimes, cases where several diseases were seen together in animals were also reflected in the archive. In the document dated 7 June 1887 (15 Ramadan 1304) written to the Ministry of Medicine, it was requested that the Veterinary Surgeon inspector of Bursa (Veterinary Surgeon of Hüdavendigar Province) should quickly go there to prevent the spread of diseases such as cemre, liver rot and cattle diseases which was seen among the sheep in Yunuslar Kary of Ağaçlı District of Izmit to the other places. The situation was reported to the province by telegram written to the Seraskeriye, and since it was known that these were the most contagious diseases, the ministry was asked to do what was necessary ⁵⁸. Another example was in Ishtip. In the document dated 25 February 1893 (8 Şaban 1310) written to the Imperial School of Medicine it was reported that there were many casualties due to the smallpox and liver rot disease that emerged in the livestock in eleven villages of the Ishtib District⁵⁹, and that the Veterinary Surgeon Inspector of province of Kosovo was sent there for the implementation of suppression measures for the treatment of the disease. Upon receiving a telegram from the province of Kosovo advising what should be done for

Hasan Şükrü Oytun, "Memleketimizin Koyun ve Keçilerinin Akciğier Nematodlarına (Metastrongylıdose) Karşı Mıntıc' in Etkisi Ve Bu İlaçla Yapılan Deneylerin Sonuçları, Cilt: 10 Sayı: 3.4(1963),261 – 273.

⁵⁷ BOA, TS.MA.e, 27 – 55. 29 August 1816.

⁵⁸ BOA, DH.MKT. / 1424 – 83. 7 June 1887.

Ishtip was a former Ottoman city, now called Štip in the Republic of Macedonia Machiel Kiel, .İştip", Türkiye Diyanet Vakfı İslâm Ansiklopedisi (*İstanbul : TDV* Yayınları, 2001) 23/440-442.

this work, it was requested that the situation be notified to the Ministry ⁶⁰.

Another document shows that at the time of the outbreak of the liver rot disease, the animals in the dairies contracted by the state were transferred to a clean area. The rental fees of the dairies where the animals were kept were also reimbursed in accordance with the contract. According to the document dated 21 June 1899 (11 Safer 1317) of the Director of the Imperial Office of Documents, since most of the sheep in the Kâğıthane Dairy, together with their shepherds, perished due to the liver rot disease, these animals were requested to be transferred from the Ayazağa Farm to the Great Dairy (Kebir Dairy) upon the document given by the local medical doctors. It was requested that the rental costs⁶¹ of the relevant dairies and pastures be covered. Since it was decided to evacuate the dairy three months after the tender was given, it was requested to inform the commission of the situation, since it was not yet known how to proceed about the collection and contract (itikad) rent.⁶². In accordance with the conditions written in the contract made for this dairy and the pasture, it was stated that it was tendered to Mustafa Efendi, the meat (lahm) contractor of the Treasury of the *Hassa* for one year starting from November 1899 for a price of 80 liras. In this disease, which was concentrated in farms, the state acted quickly and sent the sick animals to slaughter. Butterfly disease, which appeared together with several other diseases, was seen in the capital and Izmit.

Kalavla Disease

Kalavla Disease or kokula is another agnam disease reflected in archival documents. We have not been able to find the exact equivalent of this disease today. The only document we can find in the archive is a letter dated 18 March 1887 (22 Cemaziyelevvel 1304) written to the Ministry of Medicine stating that no measures were taken by local officials for the contagious kalavla (Kokula) disease seen in sheep around Tripoli. The situation was sent with a document from the French Embassy. In the example of the document, the situation was asked and it was stated that necessary action should be taken⁶³. In another document written to the Ministry of Foreign Affairs two months later on 10 May 1887 (16 Şaban 1304), it was repeated that the situation was warned by the French embassy because no measures were taken for this disease. The report received from the Syrian Province was sent. The written documents of the Ministry of Foreign Affairs were also sent. It was reported that the disease was suppressed and eliminated thanks to the measures taken.⁶⁴

The Kalavla disease, of which there is only one example in the archive, was revealed with the information of foreign embassies in Syria, and the state took precautions.

⁶⁰ BOA, DH.MKT. 2055 – 98. 25 February 1893.

In modern law, it has been the name of a special type of contract that covers the types of contracts that deal with the assignment and allocation of interests and labour for a period of time in return for a fee, such as lease and employment contracts. In Islamic law, the contract of ijāra includes both the lease contract, which deals with the use of movable and immovable property, and the labour contract, which deals with the employment of human beings. Ali Bardakoğlu, "İcare", Türkiye Diyanet Vakfı İslâm Ansiklopedisi (İstanbul: TDV Yayınları, 2000), 21/379-388.

⁶² BOA, ML.EEM. / 410 – 67. 21 June 1899.

⁶³ BOA, DH.MKT. / 1405 – 62. 18 March 1887.

⁶⁴ BOA, DH.MKT.1418 – 58. 10 May 1887.



Pinworm Disease

Nowadays, there is a problem of pinworm (Triehostrongylose) disease, especially in sheep. In years when winter is severe and nutrition is poor, gastrointestinal pinworms cause a disaster. When gastro-intestinal pinworm disease is accompanied by liver rot disease or lung pinworms, this situation takes the form of a disaster⁶⁵. Effective parasite control is very important for increased productivity and welfare of sheep and goats. Clearing the entire herd on a specific programme by over-medicating will not provide adequate control in the long term. What is important is an integrated management of parasite control that focuses on techniques that reduce animal exposure to parasites, increase resistance and effectively administer treatment. This way the animals will be better protected. Monitoring parasite loads throughout the production cycle will help determine when animals need to be treated ⁶⁶. We see that this disease broke out in Bursa Province and island of lemnos and that the disease was suppressed through the measures taken.

In the document dated 16 March 1889 (14 Recep 1306) written to Province of Hüdavendigar (Bursa), it was reported that sheep and goats in some towns of Firt district in Karesi Sanjak had a disease and there were animal losses. It was stated that this disease in animals, which occurs with the first complaints from the throat to the other parts of the body, called pinworms, causes 4/3 mortality. It was requested that this disease, which emerged in the province, be suppressed with the necessary measures and that necessary action be taken quickly. In the response received from the Ministry of Public Works upon the incoming document, it was stated that the provincial sergeant inspector came to Karesi for the elimination and treatment of the mentioned disease. After the animal disease appeared in Bursa, a veterinarian was asked to be called to Dersaadet as time was needed to come from Karesi. It was emphasized that there was a civil veterinarian here and that military veterinarians had arrived in Ankara and Aydın provinces and that precautions should be taken immediately. Afterwards, it became necessary for this person to come to Bursa by road and the necessary action was requested. ⁶⁷ In the document dated 5 June 1889 (6 Shawwal 1306), it was stated that there was no trace of the pinworm disease seen in agnam and that the situation was reported to the city administration and various places. In its reply, the amirate stated that the animals coming from Bandirma to Kabatas were taken out from this pier and examined; it was reported that no such disease was found in the animals coming from Bandirma for three months and that there was no trace of the disease in the agnam of the district. It was stated that the animals were sold with the decision of the clean certificate (sehadetname) issued by the quarantine hospital in the place where the animals were checked for examination, and that the necessary action was taken by the trusted veterinarian inspectorate. ⁶⁸. In the document written by the provincial governorate to the Ministry of Health and the Ministry of Medicine a week later, it was reported that the pinworm disease seen in the agar in two districts in Karesi Sanjak was about to disappear as

⁶⁵ Hasan Zeybek, "Parazitlerin Mevsimsel Etkinlikler", Etlik Vet. Mikrob. Dergisi, , 6 (3), (1988), 261-264.

M Koyuncu.-, T Taşkın - _ Farida İbrahim Nageye," Effects and Sustainable Management of Internal 66 Parasites in Sheep and Goats, J. Anim. Prod,60 2: (2019), 156.

BOA, DH.MKT. / 1605 - 71. 16 March 1889. 67

BOA, DH.MKT.1626 - 62. 5 June 1889. 68

a result of the measures taken, and that a notification was to be made to take the necessary measures for the report given by the provincial veterinarian; and in the notification made by the governor, it was reported that the disease had decreased. It was stated that the report on the disease seen in the agnam in the Firt district was sent and the report written by the provincial veterinary inspector who came to the neighbourhood last time was also sent. It was also reported that the report was forwarded to Seraskeriye and the Ministry of Medicine for the necessary actions to be taken⁶⁹.

In some cases, we see that the situation was reflected in the documents through the officers sent for the treatment of animal diseases. For the treatment of the plague of black cattle and the Pinworm Disease seen in sheep in İzzeddin Karyesi in the Çatalca Sanjak, (detained) officers consisting of Veterinarian Major Besim of the Imperial Army's Fifth Cavalry Regiment and Major Hakkı Efendi of the Çatalca Artillery 1st Regiment were assigned to the Ministry of Health. specified. Zaptiah Sanitary Police Officers were asked to prepare the documents for the health and veterinary examination and the arrival and departure expenses of the officers should be paid from the local municipality office. In the document dated 17 April 1889 (16 Şaban 1306), the matter was notified to the military command of the army. It was also stated that the situation was written to the Serasker (*Valayi seraskeriye*) and that the necessary actions were expected to be taken ⁷⁰.

Pinworm disease also appeared in Island of Lemnos; the situation was reflected in the documents with the postponement of the taxes to be levied on animals. In the telegram dated 24 February 1900 (12 February 1315), according to the memorandum received from the Ministry of Finance, it was requested that the agnams be registered by the government officials since there was a lot of loss in the agnams that were counted, although the examples were known. Afterwards, it was requested to keep a record of cancellation (terkin) on the parliamentary administration documents.⁷¹ It was also reported that what would be done about the animals that perished on the island would be explained ⁷². In the document written to the Ministry of Finance four days later, 170 animals perished due to this deadly disease on the Island of Lemnos, and since the loss continued until the disease was eradicated, a request for amnesty was sent by the mukhtars to postpone this year's census. In the notification made via telegram to the local Mutasarrıflık, it was requested that the payment of dues be postponed for two months and that the number of agnam lost during this period be recorded in the book by the officers appointed by the local government by the owners of the ağnam. A telegram dated 12 February 1900 (2 February 1315) was sent from the Eyalet of the Archipelago stating that it would be appropriate to collect tax from the owners of animals that were not destroyed by reporting the exact amount of 2000 animals. In the document dated 1 April 1900 (3 Zilkade 1317), it was reported that the necessary measures were taken to eradicate the pinworm disease seen in the sheep on the island, and that the

⁶⁹ BOA, *DH.MKT*. 1627 – 123.

⁷⁰ BOA, *DH.MKT*. 1617 – 2. 17 April 1889.

Cancellation *(terkin)* has been likened to the tax amnesty made today in terms of the administration's renunciation of public receivables. Necati Perçin, *Türk Vergi Hukukunda Terkin*, (İstanbul:İstanbul Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, (2006), 6.

⁷² BOA, *DH.MKT.*: 2343 – 98 . 24 February 1900.



report of the general inspector from the island was delivered to the Mutasarrıflik of Lemnos although a month had passed. In the document sent by the Izmir Revenue Administration and in the telegram number 8 dated 24 March 1900 (11 March 1316) sent to the revenue depository, a record of abandonment of the animal that perished was created with the parliamentary administration document. In the document dated 14 March 1900 (11 March 1316) sent to the Council of State (Şura-yı Devlet), it was stated that measures to suppress the disease and health arrangements to be made as soon as possible were sent to the Eyalet of the Archipelago. Information was requested from the Ministry of Forestry, Mining and Agriculture to ban the export of all animals and goods (mevad) on the island⁷³. In the document dated 11 May 1900 (11 Muharrem 1318) sent to the Eyalet of the Archipelago, it was repeated that documents were sent to the mukhtars and the situation was notified to the local Mutasarriflik in order to postpone the levy until the disease was suppressed with the request that the "tadad (census) official" not be taken from the 70% of the agnam, most of which perished due to the pinworm disease in Lemnos. In the event of a loss in the amount of the census, it was requested to record the loss in the books by the officers to be assigned by the local government; to deduct the amount of the loss after two months and to collect tax from the other animal owners.

In the document dated 25 May 1900 (25 Muharrem 1318), the path to be followed for the course of the disease was shown. The methods of combating the pinworm disease, which infected a large part of the animals in the island of Lemnos, were reported and those who did not warn the relevant authorities at the beginning of the disease were asked to be penalised. In the document written to the Eyalet of the Archipelago, it was reported in the documents of Finance Department of the Council of State that the disease was carefully monitored, and it was stated that the veterinary surgeon of Aydın Province, who was sent there to eradicate the disease, concealed the disease; In accordance with the decision dated 18 March 1898, which was also written to the custody about the person punished for the situation and the province was also informed about it. The province was asked to process the sick animals to be utilised or to send them to slaughterhouses. Slaughtering the animals to be destroyed and those that have been severely damaged by the disease, returning their skins to their owners, cleaning the animal pens, and burning all animal dung; Excellent cleaning of shepherds' pens was reported. It was stated that the pens should be watered with quicklime and dusted, and the breeders to be sold again should not be released into contaminated pastures. Even lambs were required to be kept for breeding or immediately slaughtered in slaughterhouses if they were suspected of having the disease. When a veterinarian was brought to these places, it was stated by the Sanitary Animal Commission that the export of sick animals to the Ministry of Forestry, Mines and Agriculture was prohibited. 74Pinworm disease was particularly effective in Bursa Province and Island of Lemnos; necessary measures were taken to eliminate the disease.



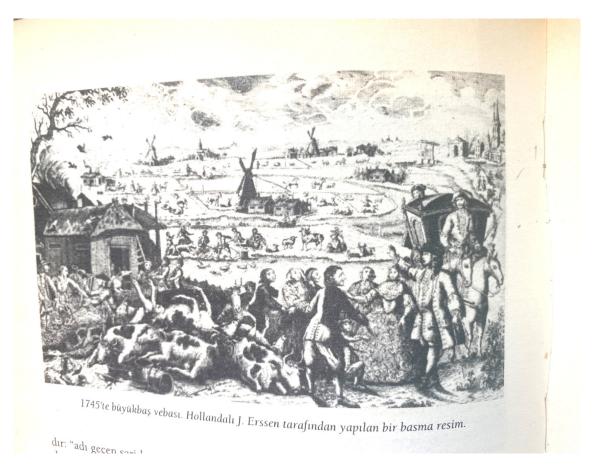


Figure Rinderpest in 1745⁷⁵

This disease appeared in Bursa, Catalca provinces and Island of Lemnos and affected small cattle. Due to the economic loss that affected Island of Lemnos for four months, the state did not collect the tax to be levied on animals. Again, in Island of Lemnos, detailed explanations were given to the public on how to combat this disease.

Rinderpest (Veba-yı Bakari-Malkıran or Çor)⁷⁶

Rinderpest showed its effects as a disease by combining with several different diseases in documents. We see that animal sales were postponed or banned due to this disease. Since the documents in the archive show that Rinderpest and agnam diseases also occurred in animals at the same time, we have found it appropriate to give a separate title here. Rinderpest analysed by Turkish veterinarians. In Istanbul, Nicolle and Adil Bey stated for

Fernand Braudel, Maddi Uygarlık Gündelik Hayatın Yapıları, Çev: Mehmet Ali Kılıçbay, (Ankara: İmge 75 Yayınları, 2004) ,78.

⁷⁶ See Also: Thomas More Madden, M.R.I.A.," The Kindeepest Of The Present Time, And The Contagious Cattle Distempers Of Former Ages", (Dublin: 1806); Lyon Playfair, C.B. LL.D. F.R.S, The Cattle Plague In Its Relation To Past Epidemics And To The Present Attack, Edinburgh Admonston And Douglas (England, 1866); P Roeder- J . Mariner, R . Kock." Rinderpest: the veterinary perspective on eradication", Article in Philosophical Transactions B · August (2013),1-13.



the first time in 1902 that the causative agent of Rinderpest was a virus that passed through the filters⁷⁷.

The first document on cattle plague is about the restriction on the sale of livestock caused by this disease. In the document dated 15 July 1889 (17 Zilkade 1306) written to the Mutasarrıflık of Izmit, the request of the poultry tradesmen who complained about the cessation of animal sales was sent. According to the document sent to the Ministry of Medicine, the poultry tradesmen complained that they were suffering from the ban on the importation of chickens, sheep and cattle into Gate of Felicity after the end of the Rinderpest disease in Izmit. It was reported that the ban would continue ⁷⁸.

From the archive, information was given that the Rinderpest could not infect both ovine and equestrian animal. In the document dated 31 January 1891 (20 Cemazeyilelahir 1308) written to the Ministry of Commerce and Public Works, it was stated that since it was not possible for animals such as sheep, goats and mules in areas with bovine plague to be infected with this disease, it was not appropriate to export the skins and offal of these animals to other places, and it was requested to temporarily send veterinary surgeons to Aydın Province. In the telegram received from the Aydın Province, it was reported that, as stated in the reply sent in the correspondence with the Ministry of Medicine, since Rinderpest could not be effective in animals such as horses and donkeys, it was necessary to act in accordance with the necessary instructions in this direction, and it was also necessary to send the permanent (temporary) veterinary surgeons requested from the province as soon as possible. According to the record of the ministry dated 24 January 1891 (12 Kanuni Sani 1306), the mentioned veterinary surgeons were requested to be appointed and sent quickly as stated in the memorandum. 79. In the documents written to the Aydın Province and the Ministry of Medicine, it was written to the Ministry of Commerce and Public Works to act according to the instructions since there would be no disease in the animals, and to send the temporary veterinarians previously requested from the province.

During the outbreak of Rinderpest, restrictions were also imposed on the transport of small ruminants. Still another element was requested to take precautions for this disease. In the document dated 11 February 1891 (2 Recep 1308) written to the Ministry of Medicine, it was stated that since the Rinderpest disease was seen in several villages of Mihaliç and in the places between Bandırma and Firt (Susığırlık), the street from Bandırma to Susığırlık was declared contaminated and the necessary scientific measures were taken. An opinion was requested from the Ministry of Medicine regarding the request to prevent the transport of sheep and lambs. It was reported that the disease would also concern the transport of sheep and lambs being sent to Gate of Felicity and that the telegram received from the Hüdavandigar Province was sent and an opinion was requested for this matter⁸⁰. In the document dated 5 January 1892 (24 Kanuni evvel 1307) written to the Ministry of Medicine, it was stated that two telegrams were sent from the Athens Embassy stating

⁷⁷ Nihal Erk, "Tarihte Önemli Sığır Vebası Salgınları ve 1920'ye Kadar Memleketimizdeki Durumu", Ankara Üniversitesi Veteriner Fakültesi Dergisi, C 10/ S. 3-4, Ankara (1963), 233.

⁷⁸ BOA, *DH.MKT.* / 1638 – 97. 15 July 1889.

⁷⁹ BOA, *DH.MKT*. 1804 – 62. 24 January 1891.

⁸⁰ BOA, DH.MKT. 1808 – 59. 11 February 1891.

that the Rinderpest disease was reported to have emerged in Yenişehir (Greece) and that there was an agnam disease in Narda Sanjak (Ioannina). The situation was reported to the medical department and the Ministry of Foreign Affairs was asked to do the necessary ⁸¹.

Animal diseases also led to changes in the routes of transport of animals. In the document dated 21 March 1898 (27 Shawwal 1315) written to Şehremaneti and the Ministry of Forestry, Mines and Agriculture, it was stated that although it was decided to sell the sheep sent from the sheepfolds of Rumelia to Gate of Felicity by loading them on the intermediate railway line when they arrived in Çatalca Sanjak without visiting the places with plague and bacari disease, there were many problems in this. Since such a change of transport would cause the price of meat to increase by another penny, reputable Rumili artisans were asked to name an alternative route for their transport. For this reason, with the memorandum received, it was stated that the scientific officers appointed to the Ministry of Forestry and Mines and Agriculture would find a disease-free route from the trust and that the documents, the details of which would be given by the decision of the Council of State, should be sent to the amirate. In the document dated 22 February 1898 (30 Ramadan 1315), it was reported that the agnams would be transported to Samil and Ayagorgi towns in Küçük Cekmece without any problems; and the black cattle would be transported continuously by land without any problems. In order to prevent the importation of animals from diseased places, it was requested that they be authorised to be transported to Gate of Felicity by road and that care and attention be paid to take the necessary measures. It was stated in the documents that the situation was written to both amirate and the Ministry of Forestry and Mines and that the necessary actions were taken from the State Property Office 82.

A combination of several measures has contributed to the emergence of the disease. In the document dated 15 December 1899 (11 Şaban 1317) written to the Ministry of Forestry, Mines and Agriculture, it was requested that necessary precautions be taken because rinderpest disease was seen in sheep in the Piraeus village of Hamidiye district and in the Ceviz village of Homs. It was stated that the situation should be notified to Mutasarrıflik of Hama, the provincial medical inspector should be sent immediately for the necessary measures, 80 heads (res) and 30 heads (res) perished from the plague. The Mutasarrıfs were informed that the villages should be cordoned off to prevent the disease from spreading to other villages. It was requested to notify the result of the work by telegram dated 22 November 1899 (26 Teşrini Sani 1315) received from the Syrian Province⁸³. In the document dated 9 February 1900 (8 Shawwal 1317) written to the Syrian Province, it was reported that there were many casualties due to diseases. In addition, it was written to the Ministry of Forestry and Agriculture to send a provincial veterinarian to the Beirut Province in order to take precautions. It was desired to try to eliminate the disease by vaccinating animals⁸⁴.

⁸¹ BOA, DH.MKT. 1909,71. 5 January 1892.

⁸² BOA, BEO 1095 – 82062. 22 February 1898.

⁸³ BOA, *DH.MKT.* 2284 – 127. 15 December 1899.

⁸⁴ BOA, DH.MKT. 2303 – 40. 9 February 1900.



In Europe, we see that the government in England made compensation payments for rinderpest as early as 171485. Compensation to be paid for animals was mentioned for the first time in the law of 190486. Considering our situation, it would be necessary to wait for the Republican Era to provide compensation for animal deaths. In the document written by the General Directorate of Public Enforcement on September 8, 1926, it was requested that some articles of the Animal Law, written to the Grand National Assembly, be amended for the compensation to be given for animals that perished due to diseases such as plague, goat pneumonia and equinia (ruam)⁸⁷. The veterinary directorate general document dated 7 May 1926, written from the Agricultural School dated 5 December 1921 (5 Kanuni evvel 1341), was sent. The Deputy of the Ministry of Agriculture sent the document dated 8 August 1924 to the Presidency of the Turkish Grand National Assembly at the School of Agriculture, stating that compensation would be paid for the animals known to be infected with the plague, glanders and goat pneumonia (zat'ül cenp)⁸⁸ diseases mentioned in Article 2, by determining the value of the animal in accordance with Article 3. Laws were sent to the National Assembly to determine the rates of compensation to be given to the owners of animals that perished due to these diseases according to the losses incurred⁸⁹. In 1928, a law covering the diseases faced by all farm animals was published. How to act in the fight against diseases was described in detail in this law90. Article 2 of the first chapter under the heading of general (general) articles lists the diseases defined as contagious diseases that are subject to the provisions of this law and are obligatory to be notified:

- 1 Cattle and buffalos(Sığır vebası veya malkıran)
- 2 Cloven-hoofed animals(Humma-yı kılai- şap veya tabak hastalığı)
- 3 In various types of animals(Cemre veya dalak hastalığı)
- 4 Cattles (Arazî cemre- Yanı kara)
- 5 Cattles (Sarî muhiti zatürreesi- sığırların ciğer ağrısı)
- 6 Cattles (Tederrün Verem)
- 7 Buffalos (Barboni yahut pastorellozi & boğaz hırlama veya çemberleme hastalığı) ve Cattes (Pastorellozi)
 - 8 Goats (Sarî zatürreesi & Keçilerin ciğer ağrısı)

Nihal Erk, "Tarihte Önemli Sığır Vebası Salgınları ve 1920'ye Kadar Memleketimizdeki Durumu", Ankara Üniversitesi Veteriner Fakültesi Dergisi, C 10/ S. 3-4, Ankara (1963), 227.

⁸⁶ Ergin, "Mecelle-i Umur- 1 Belediye, 3341.

⁸⁷ Equinia (Ruam) is a highly contagious and fatal zoonotic disease that primarily affects horses. Ruam disease, which has a wide spread all over the world and causes great losses in single-hoofed animals, has been eliminated with treatment. T.A. Torba. Burkholderia Mallei: Ruam Hastalığı, Estüdam Halk Sağlığı Dergisi,;5(2): 2020, 353-61.

Zatulcenp, chest pain, fever, chills, chills, cough, etc. inflammation of the pleura that occurs with symptoms; popularly known as "satlıcan".

⁸⁹ BCA, 220;186 - 282 - 14. 5 December 1921.

⁹⁰ Resmi Gazete , Kanun , (Hayvanların Sağlık Zabıtası Hakkında Kanun , Law on the Health Control of Animals, Published and Announced in the Official Gazette: 14 May 1928 - No: 888), no: 1234.

- 9 Sheep ,goats and Camel (Cedrî & Çiçek hastalığı)
- 10 Horses and Donkeys (Ruam ve arraveya mankafa ve sıraca)
- 11 Horses (Istilâî eviyei lenfaiye iltihabı -salgın beyaz damar hastalığı)
- 12 Horses (Marazı cimaı -Beygir firengisi)
- 13 Horse and donkey and ruminants(Cerep & uyuz hastalığı)
- 14 Every kind of animals (Da'ülkelp &kuduz hastalığı)
- 15 Pigs (Sarî zatürreesi, vebası, humması &kızıllık hastalığı)
- 16 Birds pastorellozi (tavuk kolerası), plague, typhoid and diphtheria (kuşpalazı hastalığı)

For Rinderpest, which is the most dangerous animal disease, animals were treated with veterinarians and tried to be kept under control with cords. Because of this disease, cattle were also prevented from being kept together with livestock and riding animals. The routes of the roads were also changed for the animal sales to be held. In this way, it was ensured that trade was not disrupted. It was also observed that the state did not take any measures to relieve the people financially due to the casualties caused by animal diseases.

Hoof-and-Mouth Disease

Cattle, pigs, sheep and goats, buffaloes especially in Asia and South America, African buffaloes and impalas in Africa are of great importance in the natural epidemiology of the disease ⁹¹. The only information about this disease in the archive is related to the restriction of the sale of livestock due to Hoof-and-mouth disease. In the document dated 20 April 1911, sent by the chief secretary to the Ministry of Vidin Consulate on behalf of the Ambassador of Sofia, document was written to the embassy to the embassy in order to obtain information on the status of Hoof-and-mouth disease "in accordance with the procedure to which bacteria and ganemi substances are subjected" in accordance with the disease and animal laws. It was requested to remove the restriction that the procedure applied to cattle and sheep to be purchased from Bulgaria was causing losses to Bulgarian traders. For this reason, in the correspondence made with the Ministry of Foreign Affairs, it was stated that the disease occurred at several points; the situation was conveyed to the Vidin Consulate. ⁹².

Animal trade was prevented in this disease that emerged on the Bulgarian side, the name of which we do not come across much in archive documents. This disease, which occurs especially in animals such as cattle, sheep, goats and wild boars, is highly contagious and spreads rapidly among animals. We could not find any other information about the precautions for the disease.

Yel Disease (Nutritional muscular dystrophy)

Nutritional muscular dystrophy also known as white muscle disease; is a disease characterized by degeneration of skeletal and cardiac muscle fibers in lambs as a result

⁹¹ Ömer Barış İnce - Ö Kanat," Şap Hastalığı", Etlik Vet Mikrobiyol Dergisi, 26 /2(2015): 45-51.

⁹² BOA, HR.SFR.04. 372 – 110. 20 April 1911.



of vitamin E and selenium deficiency, and is manifested by locomotor disorders. White muscle disease is one of the most important causes of non-infectious lamb mortality in the neonatal period. This disease, occurs intensively between 2 and 6 weeks. It is commonly seen in lambs whose mothers are fed with feeds deficient in selenium. In certain areas it can affect 20-30% of the herd and mortality in cardiac form is close to 100%. It is known as "Bohça" and "Yel"⁹³, which is shaped due to selenium and vitamin E deficiency in newborn and young hoofed animals. In the document dated 2 May 1894 (7 Zilkade 1312) written to the Ministry of Forestry, Mining and Agriculture, it was seen that the sheep in Şeyh, Cuma and Kocaşeyh Karyes of Komotini Sanjak became bad due to the disease called "yel", which has a bacteriological aspect, and died by having their eyes cut off. It was stated that in the document dated 14 April 1895 (2 April 1311) sent from Edirne to the Ministry of Forestry, Mining and Agriculture stating that the Liver Rot disease seen in sheep and goats in Şeyh, Kabaağaç and Bektaşlar villages of Komotini Sanjak was cure. ⁹⁴. There is no other explanation in the document.

We were able to observe from the documents that Yel's disease, seen in the Balkans, occurs when animals are not fed properly, but also has a bacteriological side.

Pneumonia (Pnömoni)

Respiratory system diseases are one of the most common diseases that are frequently seen in cattle and sheep breeding and cause economic losses, and the control and management of these diseases are gaining importance day by day 95. Goat pneumonia is a complex disease with a complex etiology that causes significant economic losses in goat breeding countries 96

According to the notification dated 10 May 1898 (2 Şaban 1305) written to the Ministry of Health, in the telegram received from the province, it was stated that there were not many animals that perished due to the transmission of pneumonia to sheep and other animals in the Payas and Osmaniye districts of Adana, and that the necessary precautions were taken by burying those who perished in wells. It was requested to continue all efforts to carry out the necessary procedures ⁹⁷.

We cannot obtain any detailed information about our last illness, pneumonia, as there are not enough documents in the archive. Pneumonia was prevented by culling sick animals and burying them.

2- Agnam Cases In The West And East

When we look at the situation of animal diseases, we see that diseases are generally

⁹³ Uğur Aydoğdu, "Kuzularda Neonatal Mortalite", Cumhuriyet Üniv. Sağ. Bil. Enst. Dergisi, 1/2: (2016),39.

⁹⁴ BOA, DH.MKT. 370 – 28. 14 April 1895.

⁹⁵ Baykan Küçük, – Tabak Zeynep-Mehmet Hakan- 'Aslı Kılıç - Hale Gün, - Alper Mete,"Marmara Bölgesi'nde Pnömoni Görülen Sığır, Koyun ve Keçilerin Akciğerlerinden İzole Edilen Etkenlerin Bakteriyolojik Yöntemlerle Araştırılması ve Epidemiyolojisi "'Kocatepe Veterinary Journal Kocatepe Vet J. 16/2: (2023) ,209.

⁹⁶ Zabid Yener - Kemal Gürtürk - Yavuz Gülbahar - Hasan Solmaz, "Bitlis Mezbahasında Kesilen Keçilerde Pnomoni Olguları Üzerinde Patolojik Ve Bakteriyolojik Çalışmalar "Vet. Bil . Der. 17. I : (2001),13 .

⁹⁷ BOA, *DH.MKT.* / 1494 – 61 . 10 May 1898 .

brought to the agenda due to their impact on trade, and in this sense, solutions are sought for diseases. The documents explained what the disease was and where it originated, and then how to treat the disease.

Diseases and Obstacles in the Balkans

We know that the meat supply of Istanbul and its surroundings was important. We can also see from the documents reflected in the archival documents that the Agnam diseases were concentrated in the Balkans 98.

We see that the Ottoman Empire was also informed about the diseases that emerged in Greece and Hungary in the Balkans. In the documents sent to the Ministry of Internal Affairs on 3 February 1887 (22 Tesrini Sani 1292), it was stated that the disease had been continuing with all its severity since the telegram dated 1 January 1876 (20 Kanuni evvel 1291) was received from the embassy of Narda. 99. In the embassy of Kuyum document dated 27 March 1885 sent to the Ministry of Foreign Affairs, written to the port officials by the Hungarian Naval Administration, it was reported that the disease was spreading in sheep and goats around Preveza. In this way, the aforementioned animals were requested to be examined by veterinary surgeon ¹⁰⁰.

In the archive, there are also cases where examinations were carried out in the inns where the animals were kept when the news of the disease came. When it was realised that there was no disease in the animals, the state bought these animals. In the document dated 14 February 1888 (1 Cemazielahir 1305) written to the Sehremanet, it was stated that the animals were cordoned off by the municipal sergeants in order to implement the measures regarding 1390 heads of 145 head (res) sheep, which were reported to be diseased in four inns in the Topcular in Gate of Felicity. It was reported that a warrant was sent to the Ministry of Security since the gendarmerie was requested to come to assist in this work. In the interviews with the Ministry, it was stated that the First Lieutenant Mahmut Ağa had sent the necessary number of gendarmes to the neighborhood. During the examination, it was determined that there was no disease in the sheep, and 700 sheep were purchased by the Imperial Arsenal (Tersane-i Amire) butcher, and the remaining sheep were reported to be delivered to their owners. ¹⁰¹.

We see that land, sea and even railways were also used for the transport of animals for commercial purposes. In the document dated 26 February 1889 (25 Cemaziyelahir 1306) written to the Mutasarrıflık of Izmit and the Ministry of Health, it was requested that the contagious animal disease should be examined and diagnosed and prevented, and that the passage of animals from Hereke should not be prevented in the shipments to be made by land since the railway and sea routes were under control. It was also requested to establish a

⁹⁸ R Şanal – F. Feyiz," 1890-1899 Yılları arasında Edirne ve Kazalarında Sığır Vebası: Vebâ-yı Bakarî, Düzce Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 11/1, (2021),189-200.

BOA, HR.TO.348-82. Narda is a historical city in the Epirus region of Greece, now known as Arta. İdris Bostan, "Narda", Türkiye Diyanet Vakfı İslâm Ansiklopedisi (İstanbul: TDV Yayınları, 2006) 32/385-

¹⁰⁰ BOA, HR.TO.336 – 19. 1 January 1876.

BOA, DH.MKT. / 1485 – 51. 14 February 1888.



sanitary cordon in order to prohibit the sale of animals such as cattle and sheep coming from this side and the sale of birds, bones, horns and skins loaded on ships coming by land and by sea; and to prohibit the arrival of animals. The situation was reported by Zuides Pasha in Izmid to the Mutasarrıflik of Üsküdar and the city administration, and by memorandum sent from the mutasarrıflik it was indicated that situation should be taken care and attention should be given to this matter. 102. In the document dated 23 March 1889 (21 Recep 1306) written to the Ministry of Public Works and Commerce, in response to the reply received from the Ministry of Medicine, a programme for the implementation of the necessary measures sent by Zuides Pasha to the Mutasarrıflık of Izmit in order to prevent the spread of the animal disease seen in Izmid to other animals was sent. It was also requested that animals that had contact with black cattle, sheep, goats, cows and chickens be banned. While there was no ban on eggs by the Pasha, the ban on animals and goods continues; it was stated that the export of meat, skin, nails, etc. was prohibited. A telegram dated 25 February 1889 (13 February 1304) was sent from the aforementioned Mutasarriflik and the Ministry was asked to implement the necessary measures accordingly 103. In the document dated 1 May 1890 (21 Ramadan 1307) written to the Rüsumat ve Şehremanet (formerly the city government, municipality), it was requested that the animals that the merchants would bring for their trade be guarantined. It was requested that 30-40 thousand sheep, which they had grazed in the pastures in Aydın Province in order to bring them to Istanbul for slaughter, be kept in quarantine in the said pastures for fifteen days, and after the quarantine was lifted and it was determined that they did not carry any disease, a decision was requested for their transportation to Izmir and from there to Bulgaria by steamer with the approval of the medical doctors. The telegram received from the province was reported to the Ministry of Medicine, and it was requested that if cases of the disease appeared, the animals should be loaded onto ferries and transported with the approval of the veterinarians in the areas far away from the disease, the names of the ferry and the owner of the animals and the amount of animals should be reported to the city administration by telegram, and the situation should be reported to the province ¹⁰⁴.

We sometimes see that there are problems in the issuance of clean documents (certificates) obtained from certain points for the passage of animals. In the document dated 10 December 1891, it was stated that since there was agnam disease in the place called Karenpenos in Thessaly, the undersecretary's certificates should be signed upon the instructions of our consuls, and the situation was written to the officers. ¹⁰⁵.

Situations where the officers working in the animal cordon were not sufficient were also reflected in the documents. In the document dated 3 April 1894 (27 Ramadan 1311) written from Seraskeri, it was requested that the animals to be shipped from Rumelia to other regions be examined. For this purpose, it was emphasized that Infantry Artillery 8th Regiment Veterinary School supervisor Nuri Efendi and the 3rd Veterinary Officer in the same position were sent from the Cisr Mustafa Pasha location to inform them whether the

¹⁰² BOA, DH.MKT. / 1598 - 82. (26 February 1889.

¹⁰³ BOA, DH.MKT. 1608 – 94. 23 March 1889.

¹⁰⁴ BOA, *DH.MKT*. 1723 – 32. 1 May 1890.

¹⁰⁵ BOA, HR.TO 15 – 118. 10 December 1891.

health cordon formed by these two officers would be sufficient to do the job. Documents were sent to the 2nd Army Imperial School for the artillery regiment's animals to be taken from the area to be treated and someone else to perform the cordon duty instead. Nuri Efendi, in order to continue the activities resulting from the vaccination applications that emerged in the Robyüz Village and not to break his communication with his regiment, was informed to the Ministry of Forestry, Mines and Agriculture and assigned Cisr Mustafa Pasha for inspection works. Rumelia was asked to report whether there was an animal disease in Bulgaria and Edirne province, and if so, what kind of disease it was. The Ministry of Forestry, Mining and Agriculture and the General Sanitary Zoo Inspection Commission

to inform whether Akif Efendi, one of the veterinary surgeons, was able to come¹⁰⁶.

In the document dated 10 March 1896 (25 Ramadan 1313) written to Ministry of Imperial School of Medicine, it was reported that the goat disease (zat'ul cenp) seen in the towns of Asar-1 Maltepe and Yakacık, which emerged in the town of Başıbüyük, made itself known, and that the disease was understood from the examinations of Doctor Nikol, director of the Bacteriology Department, and Captain Refik Bey. It was emphasized that the work should be accelerated in order to find a cure for the disease and to find a cure, especially with the measures taken to eliminate the disease, so as not to cause casualties. At the same time, it was stated that the efforts of those engaged in this business were evident . At the same time, it was stated that the efforts of those engaged in this business were evident 107.

were requested to provide the necessary information, and the statement of the Sanitary Department was taken and it was reported that necessary action should be taken. It was emphasized that the Provincial Veterinary Inspector should work there and accompany the 5th Branch of the Agricultural Committee, both during illness and fairs, and it was requested

In the archive documents, there are also documents in which only the results are reported as the diseases were treated and the necessary controls were carried out. In the response to the document dated 30 October 1900 (17 October 1316) written to the Rusumat Amirate, it was stated that there was no trace of the animal disease that occurred in Podgorica¹⁰⁸ and its surroundings. It was ensured that the aforementioned consulate-general in the neighbourhood was informed, as it would be necessary to carry out examinations as a precautionary measure and to issue a certificate for the control by the doctors in charge here and by the veterinary surgeons in charge in the places where they were located. In this way, a telegram received from the province was sent stating that the ban was lifted. Since the Ministry of Forestry, Mines and Agriculture and the Amirate were informed, they were asked to implement the action accordingly; however, it was stated that the sheep and cattle coming from here should be examined by veterinarians and military physicians ¹⁰⁹.

We also see that the livestock trade was disrupted due to the loss of animals. In the document dated 13 October 1902 (10 Recep 1320), it was written to the Şehremanet

¹⁰⁶ BOA, DH.MKT.224-83.3 April 1894.

¹⁰⁷ BOA, BEO, 751 – 56292. 10 March 1896.

¹⁰⁸ Podgorica is the capital and largest city of Montenegro.

¹⁰⁹ BOA, DH.MKT. 2427 - 106. 30 October 1900.



that due to the large number of deaths in Rumelia, Aleppo and Mosul, there were fewer sheep this year compared to the previous year, and that sheep should not be exported from Thessaloniki to Alexandria and from Erzurum to Russia due to the deaths in order not to cause hardship to the people. It was requested that the petition of the Military Department Contractor İsmail Efendi regarding this request be sent to the Şehremanet¹¹⁰. We do not know how this request was responded to as there are no other documents in the archive.

We observe that animal certificates stating that the animals were healthy were used during the sale of animals. Despite these documents, it was observed that Bulgaria caused problems in the sales. In the first days of the last January, sales transactions were not carried out despite a certificate issued by the Mutasarrıflık of Galata Sanitary and approved by the Kapıkethüdalık of Gate of Felicity, stating that the sheep brought to Varna by Debbağ Hasan Ağa, one of the people of Gate of Felicity, along with their certificates of testimony from Gate of Felicity on 10 March 1904, were free of disease. In this way, difficulties were caused by the Varna Sanitary Office for the animals to be exported to Edirne, and it was stated that it had not yet been confirmed that this officialship was given by the Sofia Sanitary Directorate General Office because an animal disease occurred in Gate of Felicity two years ago, and the situation was sent to the Varna Trade Ministry. Although an attempt was made here, it was reported that the Sanitary Council, which was based on a decision and order given by the Ministry of Internal Affairs of the trust dated 28 June 1902, decided to continue the measure with this issue and that this decision would be necessary whether there was an illness in Gate of Felicity or not. It was reported that Bulgaria abandoned this practice after an attempt to return the documents two years ago on the grounds of illness 111.

Again, we see that animal sales were realised with certificates. In the document dated 2 November 1906 (20 Teşrini evvel 1322) written by Müşir Arif, the acting governor of Edirne, to the Ministry of Internal Affairs, it was understood that the sheep purchased from Bulgaria by İsmail Efendi, the contractor of Daire-i Askeriye, were not diseased, and it was requested that the sales be allowed. The situation was sent to Seraskerive 112 and to the district governor of Cisr Mustafa Pasha 113. In the document dated 3 November 1913 (3 Zilhicce 1331) written to the Mutasarrıflik of Gallipoli, it was stated that 500 breeding sheep were not allowed to pass through Gallipoli due to the contagious disease in some places, and a petition signed by Ahmed Hacı Ömer from Gostivar, one of the Celeb tradesmen, was given to lift this ban by examining the animals. We see that the person stated that he bought a calf from Edirne and wrote the document requesting that the necessary action be taken accordingly¹¹⁴. Another authorisation for the sale of animals was related to Bulgaria. In the document sent by the Sofia Ambassador to the embassy from Pleven, dated 26 March 1914, it was requested that the Varna consulate should obtain a visa for the veterinary certificate that Rıza bin Emin from Bursa would show that the 300 sheep he bought in Pleven were taken from disease-free places. An application was made for this document and its status

¹¹⁰ BOA, *DH.MKT*. 594 – 52 . 13 October 1902.

¹¹¹ BOA, HR.SFR.04. 789 – 34.

¹¹² BOA, DH.MKT. 1124 - 49 -2. 2 November 1906.

¹¹³ BOA, *DH.MKT*. 1124 – 49.

¹¹⁴ BOA, *DH.İD.*. 101 – 37. 3 November 1913.

was requested ¹¹⁵. The other document is related to the authorisation document written to the Province of Edirne. In the telegram dated 1 January 1916 (24 Safer 1334), permission was requested to send 450 sheep, which were intended to be taken from Çorlu's Karasinit Farm to Silivri's Bosnaköy farm, after it was determined that they were not abandoned property (emval-i metruke)¹¹⁶ and did not carry diseases. A document was sent to the Province of Edirne to report the status of the work done, and then to give permission for the sale of animals¹¹⁷.

If we switch to the Republican period, we see that complaints were made about the wrong decision taken in British-occupied Istanbul. A telegram dated 27 October 1920 (27 teşrini evvel 1336) was sent to Maltepe Municipality Mayor Müslim Bey by the signature of Karabet Kuyumcuyan, a British immigrant at the dairy in Galata, requesting the necessary legal actions to be taken about the animal disease. In the document dated 15 March 1923 (15 March 1339), it was reported that the goats among the animals collected in Maltepe for the British Army were released with the document dated 26 October 1923 (26 Teşrini evvel 1339), although it was confirmed by the official report given by the British doctor to the Parliamentary Police. Despite the "healthy" report, it was reported that goats were prevented from gathering in the said place on the grounds that there was a disease and that all of the animals were starved and perished¹¹⁸.

Diseases in the East with Cattle Animals

Generally, all of the documents described under this heading are about the measures to be taken against agnam diseases. The first case in the archives of the eastern provinces is related to the sale of livestock in Erzurum. In the document dated 18 September 1891 (20 Safer 1309), it was requested to take health measures to prevent the black cattle disease that originated in Russia and spread to Erzurum and Bayezid. It was stated that a certificate should be obtained from the embassies of the Ottoman government stating that the bulk buffalo, cattle, cow, goat and sheep skins and other animal products from Russia were disease-free, and the sale of animals was allowed in this way. Upon the notification to the province, it was emphasised to notify the Ministry of Medicine in response and to follow up to prevent the spread of the disease ¹¹⁹.

Animal diseases had to be reported because of the large losses in animals. It is also possible to attribute this to the unwillingness of the people to report the disease. In the document dated 25 May 1892 (27 Şevval 1309) written to the Ministry of Medicine, it was stated that precautions were taken after many animals died due to the disease that plagued the villages of Albak district of Van province. The veterinarian of the province sent a telegram received from the Van Province stating that there was a sick agnam in the district,

¹¹⁵ BOA, HR.SFR.04. 873 – 22. 26 March 1914.

The concept of "emval-i metruke" refers to "abandoned, left, unknown owners". From 1915 onwards, the abandoned properties (emval-i metruke) of people who were transferred to other places and disappeared were liquidated by court decision and the income obtained was then left to the Budget.

¹¹⁷ BOA, *DH.İ.UM* / 89 – 1. 1 January 1916.

¹¹⁸ BOA, DH.İ.UM / 19 – 1. 26 October 1923.

¹¹⁹ BOA, *DH.MKT.1871 – 82. 2018 September 1891*.



and the State was asked to take necessary action. ¹²⁰. In another document dated 7 August 1892 (13 Muharrem 1310) written to the Van Province, the situation was reported to the Ministry of Medicine in a telegram dated 25 May 1892 (13 May 1308), as it was reported that 7000 sheep had perished due to the animal disease in Mahmudi village. Documents drawn up by the veterinary commission regarding the measures to be taken were sent to the Imperial School of Medicine. As can be understood from the content of the memorandum, since the disease was prevalent in some parts of the province, it was requested that the measures be increased and the procedures to suppress the disease be continued, and that whatever treatment was necessary was applied and the results were reported. It was ensured that the necessary measures were taken to prevent further spread of the disease ¹²¹.

As soon as the state received news of animal diseases, it notified the provincial centre where the disease occurred. The state also covers the expenses required for sending a neighbourhood doctor to the neighbourhood. In the document dated 27 August 1895 (6 Rabiul Awwal 1313) written to the Basra Province, we see that the round-trip allowance and the payment method of similar allowances to be given to Veterinarian Major Süleyman Vasfi Efendi, who was sent to Hammar due to the disease of Agnam, were asked. According to the telegram sent from Basra Province, it was requested to notify the Ministry of Forestry, Mining and Agriculture. In order to eradicate the disease, the situation was asked from the Basra Province; the matter was also reported to the Ministry of Forestry and Mining and Agriculture in a telegram dated 22 June 1311.

In another document, it was reported that the agnam disease was over. The Census dated 3 October 1901 (20 September 1317) was sent from the province to the Ministry of Forestry, Mining and Agriculture. The report of the veterinarian assigned for the sheep disease seen in the Hartun-i Ulya village of the Pervari district of Siirt Sanjak was forwarded. It was reported that there was no trace of the sheep disease and there was no loss of sheep for twenty days ¹²³.

In the Ottoman Empire, measures were taken to prevent diseases both in the Balkans and in the east. We observe that animal sales were attempted with certificates issued for the cleanliness of the animals. Animal trade was carried out by using railways if land and sea were available. Diseases in animals were reported by the public when large losses were incurred. Bu da bize ahalinin hastalıkları haber vermediği sonucuna götürmektedir.

3-Impact Of Diseases On Trade

The fact that animal trade was an important source of income in the Ottoman Empire and the impact of diseases in animals on the existing trade caused the control of this business to be given more importance. In fact, it was included in the documents because the emergence of diseases would disrupt trade¹²⁴.

¹²⁰ BOA, DH.MKT.1952 – 118. 25 May 1892.

¹²¹ BOA, *DH.MKT. 1983 – 76. 25 May 1892*.

¹²² BOA, *DH.MKT.* / 419 – 27. 27 August 1895

¹²³ BOA, DH.MKT. 2550 – 66. 3 October 1901

¹²⁴ For animal transports : Zabitayi Sihhiyeyi Hayvaniyye Kanun Muvakkati, 198 Muharrem 1332(1904), 3336-3345.

There are also cases where animal diseases sometimes lead to state-wide bans. The archive document does not specify for how long this was announced. With the document dated 31 May 1864 (24 Zilhijce 1280), it was forbidden to take animals to places outside Gate of Felicity. It was reported that the Chief of Imperial Foundry *(Tophane-i Amire)* forbade the removal of the mentioned animals, despite the fact that there was a previous agreement ((kontrato), because there were too many deaths in sheep, goats and agricultural animals due to some diseases. The ban had been notified to all parties with advice, and the director was asked to do the necessary for this matter ¹²⁵.

In order to prevent the disruption of trade, sometimes special permits were obtained. Since it was known that there was no disease in the sheep and goats in the Aleppo Province, but only the oxen, a document dated 19 February 1889 (18 Cemazeyilelahir 1306) was sent to the Ministry of Health to allow the sale of sheep fleece and goat skins sent to Iskenderun. It was deemed necessary to allow the sale of the skins sent to Iskenderun with a certificate of authenticity due to quarantine practices, especially only for ox skins and bones in order to prevent damage to the trade of the neighbourhood. However, it was requested that necessary measures be taken to eliminate the disease. In order to obtain a certificate of authenticity for oxen, skins and bones and to allow the sale of sheep fleece and goat skins, the situation was written to the supervision and it was requested to do the necessary by sending documents ¹²⁶.

There is also information about controlled sales in the documents. In the document dated 27 August 1891 (15 August 1307) written to Aydın Province, it was requested to prohibit the export of livestock due to animal disease in some parts of the province. It was stated that since the local government prevented the sale of animals intended to be sent from Izmir to Crete, only the sale of sheep for butchering from non-contaminated places was permitted on a controlled basis.¹²⁷.

It is stated in the archive documents that the sales of animals that were controlled during quarantines took place. In the document dated 25 April 1892 (27 Ramadan 1309) written to the Ministry of Health, it was reported that the transport of 5000 head (res) of cattle and 500 cattle landed in Batumi from the Caucasus by Mustafa Bey to Gate of Felicity by sea had been hampered by the local government. The situation was reported to the Ministry of Foreign Affairs and reported to the Şehremanet. It was requested that the animals transported by sea from the Russian State be allowed to pass after being examined by the veterinarians of the Kovak quarantine hospital and confirmed that the disease had disappeared. It was stated that the reason for preventing the import of sheep and cattle was the presence of disease in the animals in these areas ¹²⁸.

Some information about the general practices to be carried out when the diseases were eliminated throughout the country is also reflected in the archive. In the memorandum dated 16 October 1892 (24 Rebiülevvel 1310) written by the Minister of Foreign Affairs to

¹²⁵ BOA, A.}MKT.MHM. / 301 – 88. 31 May 1864.

¹²⁶ BOA, DH.MKT. / 1596 – 49. 19 February 1889.

¹²⁷ BOA, DH.MKT. 1714 – 107. 27 August 1891.

¹²⁸ BOA, DH.MKT.1942 – 116. 25 April 1892.



the Ministry of Commerce and Public Works, it was stated that the infectious disease (Illet-i Müstevli) seen in sheep in the Ottoman Empire had disappeared. Since it was necessary to inform where in France these sheep would be sent and how many sheep were sent annually, it was requested to take action. It was requested to lift the ban on the sale and to do the necessary according to the reply received from the Ministry of Foreign Affairs¹²⁹.

We see that the livestock trade to the Ottoman Empire via Bulgaria was quite busy. Commercial traffic here has been endeavoured to be maintained through inspections. In the document dated 8 December 1892 (18 Cemazeyilevvel 1310) written to the General Ministry of Military Affairs, it was stated that due to the livestock disease that emerged in Bulgaria, the certificate of the veterinary commission reported in the document received from the captain's office stated that the livestock brought from Bulgaria were clean and that the owners were asked for and shown the certificates. It was requested that animals in this manner be allowed. Necessary notification was made to the Ministry of Health, the Revenue Administration and the Edirne Province; and it was asked from the Dubence Community Revenue Administration for which type of animal a certificate would be obtained from the response to the memorandum received from the revenue depository. It was stated that the director would be informed about the need for a certificate of cleanliness of sheep, black cattle and pigs. The Thessaloniki Revenue was asked whether the document sent to the ministry to which the job would be reported was deemed appropriate, and the necessary action was taken and requested¹³⁰. In another document, it was requested to remove the sales restrictions on animals. As stated by the border officials on the side of Cisr Mustafa Pasha in the telegram dated April 1, 1892, it was stated that the sale of some agnas to the Ottoman Empire was prohibited and this was done as a precaution¹³¹. In the document dated 14 May 1893 (29 Shawwal 1310), it was stated that since there was no animal disease in Bulgaria and Kapikethuda of Rumelia at the moment, the ban on selling sheep coming from Bulgaria to the country should be lifted and the animals should be allowed to pass through the border inspection with the approval dated 12 April 1893¹³².

In some documents it was stated that the sale of animals was unnecessarily hampered. In the document dated 12 August 1896, it was written that the rejection of the cattle skins purchased by the Kanbazidi brothers from the Kartal slaughterhouse and shipped to Russia on the pretext of sheep disease in the vicinity was not a correct approach, because there was no such situation ¹³³. The Grand Vizier's document dated 5 March 1898 (11 Shawwal 1315), written to the Ministry of Internal Affairs, states that the aghna shipped to the Egyptian line from provinces and Mutasarrıflık such as Aleppo, Syria, Beirut, Jerusalem, Cebel-i Lebanon was banned by the joint interstate sanitary council in Alexandria due to the concern that it would spread disease. It was reported in the document dated 27 February 1898 (5 Shawwal 1315) that such an attitude was a precautionary measure. It was deemed appropriate to thoroughly examine once again whether there was an animal disease. It was

¹²⁹ BOA, BEO, 100 – 7468. 16 October 1892.

¹³⁰ BOA, DH.MKT. 2029 – 65. 8 December 1892.

¹³¹ BOA, *DH.MKT.* / 39 – 41-3 . 1 April 1892

¹³² BOA DH. MKT. / 39 – 41. 14 May 1893.

¹³³ BOA, , HR.TH.. / 180 – 4. 12 August 1896.

requested to investigate the prohibition of the entry of animals with the claim that they were diseased and to take necessary measures if any¹³⁴.

In the document dated 9 February 1899 (28 Ramadan 1316) written to the Ministry of Forestry, Mines and Agriculture, it was requested that a veterinarian be sent there to take precautions against a kind of sheep disease that appeared in the Terkomya Village of the Halil district of the Sanjak of Jerusalem. For this purpose, the Ministry was asked to do what was necessary in the telegram sent by the Mutasarrif of Kudus Sheriff ¹³⁵.

In order not to disrupt the animal trade, efforts were made to act with testimonies; In particular, it was requested not to prevent unnecessary blocking of agnam. The archive also records cases in which the state permitted the sale of livestock in some provinces in order not to hinder sales.

4-Practices At Halkali Agricultural And Veterinary School

Breeding and care methods were also developed in animal husbandry. After these developments in agriculture and animal husbandry began to be achieved, modern agricultural schools were opened instead of traditional agricultural education in order to bring the modern understanding to the masses ¹³⁶. Studies on animal diseases were also carried out in the Halkalı Agricultural and Veterinarian School. The section created regarding practices related to animals was managed by the veterinarian inspector, not the agricultural inspector ¹³⁷. In 1898, we see that it was requested to repair the parts of the Halkalı Agricultural and Veterinarian School that were in need of repair and to reconstruct the animal hospital. In case of any disease in the animals, efforts were made to minimize the cost by saying that a part of the barn could be reserved for sick animals¹³⁸.

The first information about the vaccine for cemre disease in the institution appears in documents in 1893. In the document dated 15 August 1893 (2 Safer 1311), the Minister of Forestry, Mining and Agriculture emphasised that vaccines could be supplied every week by parcel post, especially from Europe. It was reported that if an attempt was made to start production, it would cost 61,347 kuruş for the installation of the vaccine, 62,835 kuruş for the supply of tools and materials, and 124,182 kuruş in total. It was stated that 2000 kuruş per year would not be enough for the expenses. The scientific committee of agriculture considered forming a commission consisting of Nurlurus Pasha and other scientifically knowledgeable people and decided to take a decision for examination ¹³⁹.In the document written by the Grand Vizier (Serdarı Ekrem) to the Ministry dated 19 September 1893 (8 Rebiülevvel 1311), the situation was informed to the Ministry of Forestry, Mines and Agriculture. For the treatment of Cemre disease with the Pasteure vaccine, 100 people were

¹³⁴ BOA, *DH.MKT.* 2088 – 64. 27 February 1898.

¹³⁵ BOA, *DH.MKT.* 2166 – 2. 9 February 1899.

Muammer Demirel - Fatma Kaya Doğanay,"Osmanlı'da Ziraat Eğitimi: Halkalı Ziraat Mektebi ,U.Ü. Fen-edebiyat Fakültesi Sosyal Bilimler Dergisi, Sayı: 21 /2, (2011), 83-199.

Volkan Çeşme, *Halkalı Ziraat Mektebi*(İstanbul :İstanbul Üniversitesi, Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi,(2011),5.

¹³⁸ Ceşme, Halkalı Ziraat Mektebi ,34-35.

¹³⁹ BOA, İ...HUS. 16 - 81 -4. 2 Safer 1311,



available to administer this vaccine at the Veterinary School in Halkalı, and since it was thought that this would increase further and there was a possibility that the disease could be transmitted to humans as well as animals, precautions were requested. It was repeated that a commission was formed for this task, and while it was requested that the vaccine be manufactured along with the construction of an operating room, it was later stated that the vaccine could not be administered here¹⁴⁰. We see that the idea of producing a vaccine has been abandoned for some reasons. It was reported in the document dated 25 September 1893 (14 Rabi' al-Awwal 1311) that the vaccine administered in Europe was allowed to be administered within the country due to the vaccination practices carried out in Europe, where there was no need to establish a commission¹⁴¹.

Once it has been decided where the vaccine will be purchased, it is time to decide where in the country the vaccine will be administered. In the document dated 23 November 1893 (14 Cemazevilelevvel 1311), it was requested that Cemre disease be tested in 5-10 sheep, which were property of the school, in Halkalı Agricultural School, in order to start the treatment of cemre disease with the Pasteure method. In the certificate written by the commission formed at the School of Agriculture and Veterinary Medicine, it was decided to apply the substance created according to Pasteur's tenets, and this opinion was mostly accepted. If enough veterinarians were trained, the necessary equipment was requested to be purchased from Europe upon completion of the construction of the operating room, to be reported to the province. For this purpose, it was requested that a suitable amount of parcel post be purchased from Europe for the said school, which required an annual cost of 124 thousand kuruş and 2000 kuruş. The decision of the State Council regarding the instructions of the Sanitary Law and the implementation of the relevant provisions made it necessary for all animals to be vaccinated for their treatment in case of disease. In order to vaccinate the animals of the diseased village people, the Veterinarian Inspectorate was asked to inquire about the situation and to act in accordance with the memorandum received from the Şehramanet¹⁴². Three days later, the situation was written to the Ministry of Forestry, Mining and Agriculture by the Grand Vizier (Sergeant Ekrem). It was requested to consider whether vaccination against Cemre disease according to the Pasteure method would be beneficial and whether the conditions required for the production of the vaccine (madde-yi mülhaka) may lead to different negative results. In the document from Monsieur Pasteure's teacher, it was stated that about 4000 of the 10,000 sheep to which the vaccine was administered in Austria had perished. It was repeated that the Ministry of Forestry, Mines and Agriculture was informed that the Ministry of Forestry, Mines and Agriculture was asked to test it on sheep at Halkalı Agricultural School in order to investigate the issue¹⁴³.

The specific areas and seasons of vaccination have also been determined. In the document dated 5 December 1893 (26 Cemazielevvel 1311) written to the Ministry of Internal Medicine, it was also stated that after the completion of the operating room planned

¹⁴⁰ BOA, Y..A.HUS., 280 – 52. 19 September 1893.

¹⁴¹ BOA, İ..*HUS. 16 - 81 -5. 25 September 1893*.

¹⁴² BOA, BEO / 316 – 23681. 23 November 1893

¹⁴³ BOA, *Y..A.HUS.*, 285 – 31.

at the Imperial School of Medicine for the vaccination of Cemre disease with the Pasteure method, animal owners whose animals are sick may refrain from having the procedure done on their animals. In the spring season of April and May, a trial was conducted on five or 10 sheep belonging to the Halkalı Agricultural School, and after its benefit was proven, it was written to the Ministry of Forestry and Mining that it would be necessary to implement it, so it was repeated that it should be treated accordingly 144.

As important as it is to bring the vaccine from outside, it is also desirable to provide a sufficient number of doctors who will carry out this vaccination. In the document written to the Şehremanet on 16 December 1893 (7 Cemazeyilelahir 1311), it was aimed that if Pasteure vaccines were useful, they could be applied by training enough veterinarians, as shown in the document prepared by the commission established at the Agriculture and Veterinary School. In case the disease occured, the vaccine would be sent to the province in Gate of Felicity and its affiliates, Catalca and İzmid Sanjak, by placing an appropriate amount of guard posts in the school where it was requested to be administered; it was reported that the details would be announced by the veterinary inspectorate. For this purpose, a document dated 19 October was sent; in the correspondence with the Ministry of Forestry and Mines, it was reported that until the construction of the operating theatre at the Imperial School of Medicine for the production of the vaccine was completed, for the time being it would only be applied to prevent the loss of sick animals in the areas where the disease broke out. It was also requested to open a vaccination centre (telkihane) where the Pasteure vaccine could be administered during the vaccination season in April and May. Again, while emphasizing the implementation of the vaccine in 5-10 sheep belonging to Halkalı Agricultural School, the necessary information was given to the ministries. The vaccines planned to be used as a precaution against Cemre (Anthrax) disease were tested on sheep in Halkalı Agricultural School during the vaccination season and if positive results were obtained, it was requested to notify all provinces for their use¹⁴⁵.

In the document dated 27 December 1893 (12 Cemazieahir 1311) written by the Minister of Internal Affairs to the Ministry of Forestry, Mining and Agriculture, it was requested to understand whether the construction of the Vaccine Building in Halkalı Veterinary School was dangerous or not and whether the vaccine (madde-yi mülhaka) could be produced there. A memorandum dated 10 December 1893 (1 Cemazielahir 1311) was sent for the establishment of a commission consisting of people who know scientific microbes together with His Excellency Zümoros Pasha. Since it was clear from various experiences in Europe whether the hospital would be beneficial in the Pasteur style vaccination process, it was requested to vaccinate Cemre disease according to the Pasteur method, and it was stated that the commission to be formed should be abandoned ¹⁴⁶. The application of this vaccine, which was in practice in Europe, in the Ottoman Empire was written in the chief inscription of the Mabeyn Humayun. It was requested to continue the arrangements in order to take the necessary actions.

¹⁴⁴ BOA, BEO 322 – 24143. 5 December 1893.

BOA, DH.MKT. / 171 - 11. 16 December 1893. 145

¹⁴⁶ BOA, BEO 282 – 21111. 10 December 1893.



According to archival documents, firstly, it was decided where the vaccine would be procured, and then it was investigated where the financial costs of the work would be paid. In the document dated 18 June 1894 (14 Zilhicce 1311), it was reported that it was requested to purchase 20 head (res) sheep and 10 head (res) horses, cows, calves and oxen in order to conduct trials of Monsieur Pasteure's vaccine at Halkalı Agriculture and Baytar School, and to build an experiment house (tecrebekah) in the 150-200 metro long shed of the school. It was stated in the memorandum issued by the commission that a total of 11,760 kuruş would be spent for the members of the veterinary commission to go to Halkalı and do the tests. It was notified on 23 December 1893 (14 Cemazielahirde 1311) that the fee would be given from Ziraat Bank under the name of general agricultural expenditure. It was notified to the Ministry of Commerce and Public Works that 50,000 kuruş would be required for the work, and it was requested that the season was suitable for vaccination and that the work should be started. It was written to the Ministry of Forestry, Mines and Agriculture to be allowed to cover the expenses of the house purchased and needed to be built for the treatment and research of the cemre disease in animals ¹⁴⁷.

The purchase of the vaccine takes up to six months. In the document dated 23 December 1894 (14 Kanunievvel 1310) written to the Ministry of Forestry and Mines, it was requested to cover the expenses of the cemre disease that would be experienced at Halkalı Agricultural and Veterinary School. For this purpose, in the document written to the Ministry of Commerce and Public Works on 15 February 1895 (19 Şaban 1312), it was stated that 10,760 kuruş required for the cemre disease to be experienced in Halkalı Agricultural and Veterinarian School, and 50,000 kuruş for the treatment of diseases were stated on 10 December 1894 (11 Cemazielahir 1312). It was notified to the Ministry of Forestry, Mines and Agriculture with a document dated. Documents were also sent to the Ministry of Commerce for the receipt of the money 149. The Minister of Forestry, Mines and Agriculture informed the Ministry of Commerce that an application should be made to the Ziraat Bank to receive the money, but it was written to the Ministry of Commerce and Agriculture that the money could not be paid from the bank 150.

The sample area where the vaccine will be administered has been selected and the applications have started. In the document dated 8 April 1896 (27 Zilkade 1316) written by the Grand Vizier, it was requested that the vaccination of Cemre disease with the Pasteure method should be put into practice in the Küçükçekmece district and Çatalca Sanjak by the veterinary police officers. Since it was not known how many animals would be vaccinated by Monsieur Nikol, the director of the bacteriological department, it was requested that enough vaccine be administered to 10,000 sheep for the time being. It was reported that 1500 kuruş, the cost of bringing the syringes from Europe, was to be collected from the local inspection tax in accordance with the "zabita-yi sanhiyeyi hayvaniyye instruction". The Ministry of Forestry, Mines and Agriculture explained the work and the stages of its

¹⁴⁷ BOA, ŞD. 517 - 18 -3. 23 December 1893.

¹⁴⁸ BOA, BEO, 533 – 39942. 23 December 1894.

¹⁴⁹ BOA, BEO / 571 – 42788. 10 December 1894.

¹⁵⁰ BOA, BEO / 571 – 42788-3. 10 December 1894.

implementation in the memorandum read at the State Finance Office¹⁵¹.

In another document received three years later, information was given about the costs of the vaccine brought from abroad related to this disease. In the document written by the Revenue Chief dated June 1, 1900 (2 Safer 1318), it was requested that the tax issue regarding the vaccine brought from Paris to be inoculated against the agnama for cemre disease be resolved. It was sent to the directorate of the school to collect this fee from the Hamidiye Agricultural Surgery School Fund. The remittance of this fee was notified to the province of Thessaloniki. It was stated that Agnam disease is an even more important disease because it is possible to transmit it to humans in a dangerous way. Therefore, it was stated in the memorandum dated 26 May 1900 (13 May 1316) from the Ministry of Forestry, Mines and Agriculture that the animal owners would be protected from the damage that would occur, the vaccines would be exempt from the customs duty imposed by the state, and the amount would be collected by the Thessaloniki customs. With the document dated 1 June 1900 (2 Safer 1318), it was reported that unless a document was sent for customs exemption, the procedures regarding the customs exemption of vaccines could not be carried out¹⁵². In the document dated 1 August 1900 (4 Rabiulahir 1318) written to the Revenue Office and the Ministry of Forestry, Mining and Agriculture, the vaccine to be made against the cemre disease was brought from Paris for the second time by the Selanik Province, and the Forest Mining and Ziraat Office was requested to collect the 152 kuruş, which was the customs fee to be paid for the vaccine. It was sent to the Ministry of Internal Affairs. The situation was authorised by the decision of the Council of State. The Ministry of Forestry and Mining and the Ministry of Agriculture wrote to the customs office to avoid customs duties on the vaccines and the necessary information was given to the ministry¹⁵³.

Although the Ottoman Empire's relationship with the cemre disease dates back to 1860, a remedy was sought since it was feared that this disease would infect people as of September 1863. In 1896, the costs of the cemre vaccination were covered. The fees required for another overseas purchase of the Cemre vaccine in June 1900 are also reflected in the archive. The bureaucratic procedures for the vaccine being imported took a very long time. Instead of manufacturing the vaccine, the state found it more reasonable to purchase the Pasteure vaccine, which was already in use and had shown positive results in Europe.

Conclusion

We have tried to deal with the agnam diseases that emerged in the Ottoman Empire and other countries neighbouring its borders with the cases reflected in various provinces of the state. First of all, information about which diseases emerged in the country was given and how these diseases were intervened and what kinds of measures were taken were tried to be explained. We know from the laws that there are many diseases in the country that are not reflected in the archive documents. In particular, we have seen that measures were taken to help the people in case of diseases, and even sick animals were purchased to prevent the losses of farms or livestock owners. The state considered producing a vaccine in order to

¹⁵¹ BOA, İ..*OM.*. 5 – 41-2 . 8 April 1896.

¹⁵² BOA, SD. 591 – 51.Date: 2 Safer 1318(1 June 1900).

¹⁵³ BOA, BEO, 1527 – 114475. 4 Rabiulahir 1318 (1 August 1900).



prevent the cemre disease in animals, but then, due to the cost of this work, it was deemed more appropriate to bring the pasteure vaccine, which was applied in Europe and gave positive results, to the country. Halkalı Agricultural and Veterinary School was established as a research centre that could carry out various applications on both agricultural plants and animals. This institution was an important facility that reflects the importance given by the state to agriculture and animal husbandry. The most important aspect of this disease compared to other diseases is the danger of transmission from animals to humans. As far as we understand from the documents, the state did not have enough staff to produce vaccines, nor did it have the financial power to undertake this work in economic terms. In Halkalı Agricultural and Veterinary School, studies were carried out on domestic sheep for the application of the vaccine imported from abroad. With the selected pilot applications, animal owners also vaccinated their animals in certain seasons. Even for the administration of the pasteure vaccine, which was purchased from abroad, a veterinarian must be trained.

The state made the first intervention against the diseases by means of baytars. In order not to disrupt the animal trade, it was endeavoured to act with the clean certificate (şehadetname) given to the animals; in particular, it was requested to prevent unnecessary obstructions in the sale of agnam. For this reason, we see that the complaints of some merchants are also reflected in the archive. In particular, we see that the animal trade was carried out through the Balkans, and that the restrictions here were tried to be maintained with the instructions given. The state took care to ensure that the land routes required for transport, and even the railway if there was a sea route, were used for animal trade.

Considering how important the agriculture and livestock sector was in the Ottoman Empire, the state's efforts to ensure the continuity of the economic structure in the provinces through its interventions in animal diseases are clear¹⁵⁴. In particular, animals were vaccinated for smallpox vaccine, which reaches lethal levels in a short time. A vaccine was brought from abroad for Cemre Disease. In the interventions to be made in animal diseases, the clarity of the attitude of the state in animal diseases in which it was experienced was clear. In cases where vaccination was necessary, he also did not refrain from sending veterinarians to carry out vaccination practices. Another issue reflected in the archive is that the public reported animal diseases when the animals had reached the point of extinction. The locals tried to hide the diseases because they feared that their trade would be prevented or their The state had to implement compensation payments for the livestock would be culled. losses caused by animal diseases. The lawsuit for compensation for animals was included in the law in 1904. For this purpose, the practice of compensation could only be initiated during the Republican period. We observe that the measures taken against animal diseases were more oriented towards prevention. Some of the measures taken for this purpose are the establishment of quarantine and cordon.

The most important issue in the fight against diseases is to ensure the continuity of this business since animal trade is also related to the economic structure. The cases of disease in the documents are mostly reflected in the archive due to the prevention of the

For today see: Gülten Şen, "Kırsal Bölgelerde Yaşayan Engelli Kadınların Ekonomik Açıdan İncelenmesi; Kütahya İli Örneği". Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi,9-2, (2022), 177-189.



trade in this business. In case of disease in various provinces, the state tried to maintain trade with special permits granted in some of the provinces. The state followed up the diseases and even after the end of the diseases, it did not fail to monitor the situation. In the XIXth century, the policy implemented by the state in relation to animal husbandry and the methods of combating disease were insufficient in this period when the economic structure was very troubled and the wars continued. In particular, the difficulty in meeting the salaries of the baytars sent to the neighbourhoods with animal diseases clearly demonstrates this. In addition to the ineffectiveness of some of the interventions, trying to compensate for the losses in livestock only by not levying some agnam taxes did not satisfy the people. Animal diseases, which are an important element of animal husbandry activities, which we have tried to deal with with Ottoman archival documents, have been tried to be explained with their social and economic dimensions to the extent permitted by the documents.

SOURCES

1-Archives and Newspaper

TC Cumhurbaşkanlığı Devlet Arşivleri Başkanlığı Osmanlı Arşivi

Sadaret (Muhimme Kalemi Evrakı) A.}MKT.MHM. / 301 - 88

Babiali Evrak Odasi BEO / 282 - 21111; 316 - 23681;322 - 24143;100 - 7468,

Dahiliye Nezareti(Mektubi) DH.MKT. / 5 - 69 ;1922 - 36 ;1942 - 116 ;1952 - 118 ;1983 - 76 ; 2037 - 92 ;2024 - 135 ;2019 - 8 ;2042 - 109 ;2020 - 92 -;2046 - 25 ;2303 - 40 ;2284 - 127 ;2153 - 1 ;2166 - 2 ;2032 - 9 ;2030 - 18 ;2029 - 65 ;2055 - 98 ;2055 - 93 ;2088 - 64 ;1833 - 34 ;1909 - 71 ;1871 - 82 ;1808 - 59 ;1795 - 55 ;1804 - 62 ;1714 - 107 ;1723 -32;1749 - 51;1689 - 58;1564 - 38;1564 - 50;1573 - 85;1598 - 82;1596 - 49;1638 - 97 ;1650 - 87 ;1629 - 96 ;1605 - 71 ;1608 - 94 ;1418 - 58 ;1405 - 62 ;1467 - 55 ;1424 - 83 ;1494 - 61 ;1485 - 51 ;6 - 45 ;39 - 41 ;95 - 48 ;118 - 8 ;171 - 11 ;1113 - 71 ;1124 - 49 ;594 - 52 ;2525 - 90 ;2550 - 66 ;2427 - 106 ;224 - 83 ;370 - 28 ;419 - 27 ;182 - 37 ;1617,2 ;1626,62;1627,123;2311,78;2326,13;2343,98;2350-9

Dahiliye Nezareti İdareyi Umumiye DH.İ.UM / 19 - 1 ;89 - 1

Dahiliye Nezareti (İrade)DH.İD.. / 101 - 37

Hattı Hümayun Tasnifi HAT / 680 - 33164

Hariciye Nezareti (Tahrirat) HR.TH.. / 180 - 4;179 - 82;375 - 6

Hariciye Nezareti (Sifre) HR.SFR.04.. / 873 - 22 ;789 - 34 ;595 - 11 ;372 - 110

Hariciye Nezareti (Tercüme Odası) HR.TO.. / 15 - 118 ;336 - 19 ;348 - 82

Írade (Orman ve Maden) İ.OM.. / 5 – 41

İrade (Hususi) İ..HUS. / 16 - 81

Meclisi Vükela MV. / 54 - 35

Maliye Nezareti(Emlakı Emiriyye Müdüriyeti) ML.EEM. / 410 - 67;464 - 17;500



Şura-yı Devlet ŞD. / 517 - 18 ;591 - 51

Topkapı Sarayı Müzesi Arsivi Evrakı TS.MA.e / 27 - 55

Yıldız (Husussi Mevzuat) Y..A...HUS. / 280 - 52 ;285 - 31

TC Cumhurbaşkanlığı Devlet Arşivleri Başkanlığı Cumhuriyet Arşivi (BCA)

BCA, 30-10-0-0; 186 - 282 - 14

Resmi Gazete, Kanun, (Hayvanların Sağlık Zabıtası Hakkında Kanun, Resmî Gazete ile neşir ve ilânı: 14 Mayıs 1928 - Sayı: 888, no: 1234, s. 147-158).

2-Published Works

Ak, Mehmet ."Osmanlı Devleti'nde Veba-i Bakarî (Sığır Vebası)". OTAM, 39 /Bahar (2016), 215-240.

Aydoğdu,Uğur . "Kuzularda Neonatal Mortalite". Cumhuriyet Üniv. Sağ. Bil. Enst. Dergisi. 1-2.(2016), 37-46.

Artuk ,İbrahim ."Madalya , *TDV İslam Ansiklopedisi*,. 27/.(Ankara 2003) . p.301-302.

Artuk ,İbrahim." Nişan", TDV İslam Ansiklopedisi, 33/. (İstanbul ,2007). p.154-156.

Bardakoğlu, Ali. "İcare". TDV İslam Ansiklopedisi 2(stanbul 2000).p. 379 -388.

Bostan, İdris."Narda ". TDV İslam Ansiklopedisi, 3 (İstanbul 2006).p. 385-387.

Braudel, Fernand. *Maddi Uygarlık Gündelik Hayatın Yapıları*. Çev: Mehmet Ali Kılıçbay.Ankara :İmge Yayınları, 2004.

Burkett, C.W. The Farmer's Veterinarian, Newyork: Orange.Judd Campany, 1914.

Broun, Hugo - Öktem 'Ziya. *Mikrobiyoloji ve Salgınlar Bilgisi* . İstanbul: İsmail Akgün Basımevi. İstanbul Üniversitesi Yayınları, 1944.

Cole , S.W. *The American Veterinarian or Diseases of Domestic Aminals* . Boston: John P.Jevett, and Company, 1850.

Çeşme, Volkan. *Halkalı Ziraat Mektebi*,İstanbul :İstanbul Üniversitesi.Sosyal Bilimler Enstitüsü .Yüksek Lisans Tezi,2011.

Coşkun, Neşe. "Osmanlı Devleti'nin Son Yüzyılında Bulaşıcı Hayvan Hastalıkları". Türk Kültürü ve Medeniyeti Araştırmaları Dergisi –1 (2). Aralık – December. (2020), 20-45.

Demirel ,Muammer -Kaya Doğanay, Fatma ."Osmanlı'da Ziraat Eğitimi: Halkalı Ziraat Mektebi . U.Ü. Fen-edebiyat Fakültesi Sosyal Bilimler Dergisi. Sayı: 21 /2. (2011),183-199.

Emecen, Feridun." Ağnam". TDV İslam Ansiklopedisi, 1 (İstanbul 1988), p. 478-479.

Ergin, Osman Nuri .*Mecelle-i Umur- ı Belediye* V.6. İstanbul: İstanbul Büyükşehir Belediyesi Yayınları , 1995.

Erk, Nihal. "Tarihte Önemli Sığır Vebası Salgınları ve 1920' ye Kadar Memleketimizdeki Durumu", *Ankara Üniversitesi Veteriner Fakültesi Dergisi*, C 10/S. 3-4. Ankara 1963, 221-234.

Erdem ,Hüseyin - Çiftci Emine - Işık Kürşat -Yorgancılar,M. Ümit .*Kuzu ve Oğlak Kayıplarının Önlenmesinde Koyun Keçi Sağlığı ve Yetiştiriciliği* Akademisyen Kitabevi .Ankara,2021.

İnce 'Ömer Barış - Kanat Ö." Şap Hastalığı", Etlik Vet Mikrobiyol Dergisi.26 (2) .(2015), 45-51 .

Kiel, Machiel."Draç ", TDV İslam Ansiklopedisi, 9(İstanbul 1994), p. 522-524.

Kiel, Machiel." İştip", TDV İslam Ansiklopedisi, 23(İstanbul 2001), p. 440-442.

Koyuncu, M.-Taşkın, T- <u>Nageye</u> ,Farida İbrahim." Effects and Sustainable Management of Internal Parasites in Sheep and Goats, J. *Anim. Prod.* 60/ 2(2019) ,145-158.

Küçük, Baykan, Zeynep – Tabak, Mehmet Hakan- Kılıç, Aslı- Gün, Hale, -Mete, Alper ."Marmara Bölgesi'nde Pnömoni Görülen Sığır, Koyun ve Keçilerin Akciğerlerinden İzole Edilen Etkenlerin Bakteriyolojik Yöntemlerle Araştırılması ve Epidemiyolojisi ".*Kocatepe Veterinary Journal Kocatepe Vet J*.16(2): (2023), 209-218

Lyon Playfair, C.B. LL.D. F.R.S, *The Cattle Plague In Its Relation To Past Epidemics And To The Present Attack,* Edinburgh Admonston And Douglas ,England,1866.

Madden, Thomas More ,M.R.I.A., *The Rinderpest of the Present time and the Contagious Cattle Distempers Of Former Ages*, Dublin ,1806.

Noyan ,Abdülkadir ." *Malta Humması (Brüselloz*) ",Ankara Üniversitesi Tıp Fakültesi Mecmuası Vol.XVI. Sayı.II. Ankara Üniversitesi.Ankara. Ayrıbasım.(1963),91-96 .

Osmanağaoğlu, Şule - Melikoğlu,Berfin. "Türkiye'de Ruam Hastalığı Eradikasyon Çalışmalarına Tarihsel Bir Bakış Açısı". *Kafkas Univ Vet Fak Dergisi* 15 /3 .(2009) ,331-337.

Oytun ,Hasan Şükrü ,"Memleketimizin Koyun ve Keçilerinin Akciğier Nematodlarına (Metastrongylıdose) Karşı Mıntıc> İn Etkisi ve Bu İlaçla Yapılan Deneylerin Sonuçları, Ankara Üniversitesi Veteriner Fakültesi Dergisi, Cilt: 10 Sayı: 03.04,(1963) ,261 – 273.

Öğütlü ,Aziz . "Şarbon "Journal of Experimental and Clinical Medicine . J. Exp. Clin. Med. 29(2012),155-162.

Öncel "Selim." Brusella Enfeksiyonları: Değerlendirme ve Yönetim", *Kocaeli Üniversitesi Sağlık Bilimleri Dergisi*, Eylül. Cilt 2. Sayı 3.(2016), 25-30.

Özlü, Zeynel. "19.yy Sonlarında Osmanlı Devleti'nde Hazırlanan İki Risale: Vebayı Bakari ve Zatülcenb". Askeri Tarih Araştırmaları Dergisi. 12/23.(2014),99-114.

Perçin ,Necati .*Türk Vergi Hukukunda Terkin*, İstanbul :İstanbul Üniversitesi. Sosyal Bilimler Enstitüsü . Yüksek Lisans Tezi, 2006.

Roeder ,P - Mariner J.Kock R. .,"Rinderpest: the Veterinary Perspective On



Eradication", Article in Philosophical Transactions B · August ,2013,1-13.

Scorpio A., - Blank T. E., - Day W. A. - Chabot D. J., "Anthrax vaccines: Pasteur to the Present", "Cellular and Molecular Life Sciences Cell. Mol. Life Sci. 63 (2006) 2237–2248.

<u>Serinken, Sabri - Say</u> ,Ş. Memduh,*Brucellosis Malta Humması Dalgalı Humma*. <u>Cumhuriyet Matbaası</u>. <u>İzmir</u>,1947.

Sözdutmaz, İbrahim - Bulut 'Hakan." Koyun □ Keçi Çiçeği Hastalığının Polimeraz Zincir Reaksiyonu ile Tanısında Farklı Klinik Örneklerin Kullanımı" *Atatürk Üniversitesi Vet. Bil. Derg.* 2010; 5 (3),(2010), 113–119.

Selin ,Hacılarlıoğlu -Tülin Karagenç "Koyun Babesiosisi". *Animal Health Prod and Hyg* 4(1) .(2015), 373 – 379.

Şanal, R. ve Feyiz, F. "1890-1899 Yılları arasında Edirne ve Kazalarında Sığır Vebası: Vebâ-yı Bakarî". *Düzce Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 11/1. (2021), 189-200.

Şen, Gülten ""Kırsal Bölgelerde Yaşayan Engelli Kadınların Ekonomik Açıdanİncelenmesi; Kütahya İli Örneği". *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*,9-2, (2022), 177-189.

Şimşek, Kamuran. "Osmanlı Devri Denizli'de Sığır Vebası: Vebâ-yı Bakarî". *Belgi Dergisi*, C.2, S.19. Pamukkale Üniversitesi Atatürk İlkeleri ve İnkılâp Tarihi Araştırma ve Uygulama Merkezi Yayını. Kış 2020/I.(2020), 2068-2080.

Torba ,TA." Burkholderia Mallei: Ruam Hastalığı". *ESTÜDAM Halk Sağlığı Dergisi*. 5/2. (2020),353-61.

Turan "Mustafa. "Osmanlıdan Cumhuriyete Vebayı Bakari Salgını ve Düşündürdükleri ". *Prof. Dr. Mustafa Keskin Armağanı: Türk Tarih ve Kültürü Araştırmaları*. <u>İdeal Kültür Yayıncılık</u>, Edit: Remzi Kılıç. İstanbul.(2014), 977-993.

Tan, Seda, "İstanbul ve Çevresinde Veba-yı Bakari (1886-1891)" .*Belleten*, Aralık , Cilt: 87/Sayı: 310.(2023) ,1021-1057.

Yener ,Zabid - Gürtürk Kemal - Gülbahar ,Yavuz - Solmaz ,Hasan, "Bitlis Mezbahasında Kesilen Keçilerde Pnomoni Olguları Üzerinde Patolojik Ve Bakteriyolojik Çalışmalar ",*Vet. Bil . Der* 17. I (2001).: 13 – 20.

Zeybek , Hasan. "Parazitlerin Mevsimsel Etkinlikler" .*Etlik Vet. Mikrob. Dergisi*. 6 /3. (1988), 261-264.



Add 1 Zabita-yi Sihhiye-yi Hayvanat Law on the regulation of articles 7-17-18-19-30 and 39 of the Law (BCA, 30-10-0-0; 186 - 282 - 14)



Ziraat Vekaleti

Baytar Müdüriyet Umumiyesi Şubesi Umumi Hususi

Kanun Numarası 683

- 1.Madde (7) Bir mahalde birden ziyade hayvanat musab veya telef olduğu halde vukuatın ihbarı mecburidir. Sari hastalıkla musab olan mevaki civar kura ve kasabada yalnız bir hayvanın hastalanmış veya telefi dahi behamehal ihbari icab eder. Emraz-ı sariye-yi hayvaniyeyi kanunen ihbara mecbur olmayan herhangi bir şahıs bir mahalde kanunun 1. Maddesinde muhavvel emraz-ı sariye-yi hayvaniyeden birisinin vukuatını ihbar eylediğinde kendisine 10 liraya kadar mukafat ita olunur.
- **2.** Madde(18) Veba-yı Bakari, tedrin, ruam ve keçi zatürre-yi sariyesi hastalıklarıyla musab olupta hükümetçe telef eyleyen hayvanat için ashabına taraf-ı hükümetten mevad-ı atiyye mucibince tazminat verilecektir.
- 3. Madde (18) Bedeli tazmin edilecek hayvanatın nev ve cinsi ve kıymetleri nazara dikkate alınarak ita eyleyecek tazminat-ı hayvanatın takdir edecek kıymetinin tam sülüsan veya nısfi derecesinde olub gaye-yi tazminmat 15.000 kuruştur.
- 4. Madde (19) Veba-yı Bakariye bi'l muayene emraz-ı sariye gösterdiği cihetle itlaf olunanlar ile musabda temasda bulunanlardan terfi-yi derece-yi hıradat gösterdikleri için öldürülen hayvanat ashabına takdir olunan kıymetin tamamı ita edilir. Tederründe emraz-ı seririye ve afat-ı teşriye gösteren veya tevir gülin tatbikiyle tamil izhar eden hayvanat nisfi tederründe edilen şüphe üzerine itlaf edilipte fethmitde afatı teşriye-yi deriniye göstermeyen hayvanata tam verilir. Ve Ruamada araz seleseyi ruamye gösterenlere nısf ve malla neyin tatbikiyle ruamlı olduğu tayin edenlere sülasan nisbetinde tazminat verilir.
- **5.Madde (30)** Belediye teşkilatı olan her kasabada akıllı bir mezbaha bulunur. Ve la'cil istihlak hayvan zabhiyatı burada yapılıyor mezbaha hıfz'ül sıhha şeraitine tabi tutuluyor.Kurbanlık hayvan müstesnadır.
- **6.Madde (39)** Bir aydan üç aya kadar cins veya beş Türk lirasından 20 Türk lirasına kadar ceza-yi takdiyi müstelzim ahval:
- 1. Emraz-ı sariyeden telef olan hayvanat derilerini yüzmek ve iaşelerini veya enkazını gömdükleri mahalden çıkarmak veya satmak veya bilerek satıp almak
- 2. Emraz-ı sariye musab veya bulaşık olan hayvanatı bulaşık olmayan mahallere bilerek sevk veya nakil etmek veya satılığa çıkarmak veya bilerek satın almak
- 3. Emraz-ı sariyeden veya tahsisi veya cemre-yi bakteriyedi ve cemre-yi arziye hastalıklarından musab olan hayvanatın lahm ve enkaz ve celud ve sairesini bilerek saklamak veyahud satmak ve satın almak
- 4.Memureyn-i fenniyenin tavsiyesiyle hükümet tarafından icrası emr edilen tedabir-i fenniyenin tatbik ve icrasına mümanaat etmek ve mezbahalardan gayri mahallerde hayvan kesmek
 - 5. İşbu kanun ahkamına tabi emraz-ı sariyeden biriyle maluliyeti yahud sirayete

mazruz ve bulaşık olduğunu bildiğini hayvanatı memlekete idhal etmek

- 7.Madde İşbu kanun tarihi neşrinden muteberdir.
- 8. Madde İşbu kanun icrasına Ziraat Vekili memurdur.
- 2 Kanuni Evvel 341 ve 15 Cemazielevvel 1344

 $Add\ 2$ Halkalı Agriculture and Veterinarian School Bacteriology Building Plan(BOA, İ..HUS,16 - 81).





Add 3 Sales Registration for the Purchase of Mihaliç Farm Sheep

