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THE CORRELATION BETWEEN THE SPATIAL DISTRIBUTION OF FORESTS AND PIG FARMING IN OTTOMAN SLAVONIA*

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Abstract

The state of forests of the Ottoman Empire during the 16th and 17th centuries is a sparsely researched topic because Ottoman sources are generally silent regarding the state of forests in the mentioned period. However, Ottoman detailed (*mufassal*) tax surveys give us a lead on the possibility of researching forests through the tax on pigs and their grazing in the forests, at least in the provinces with considerable Christian population practicing pig farming. The present paper deals with the three Ottoman *sancaks* in the region of Slavonia in the 16th and 17th centuries: Sancak of Syrmia (*Sirem*), Sancak of Požega (*Pojega*), and Sancak of Pakrac (*Pakraç*, *Zaçasna*, or *Çernik*), where the Christian population represented a majority. The amount of money obtained through taxes on pigs was very high in numerous Slavonian settlements. Pigs needed to be reared by letting them graze in oak and beech forests and eat fallen acorns; this practice is called pannage. The presumption is that the surroundings of the settlements with huge number of pigs were heavily covered with oak and beech forests. Thus, the spatial distribution of pig farming settlements of Ottoman Slavonia is presumed to be correlated with the distribution of Slavonian forests. The comparison is based on the data on *resmipelit* tax in the detailed Ottoman tax surveys and on the data on the approximate distribution of forests in Slavonia in the 1698 and 1702 Habsburg censuses of Slavonia, and it demonstrates clear correlation.

Keywords: Ottoman Empire, tapu tahrir registers, Slavonia, forests, pig farming

Özet

Osmanlı İmparatorluğu'nda 16. ile 17. yüzyıllarda ormanların durumu, az araştırılmış bir konudur çünkü Osmanlı kaynakları söz konusu dönemde ormanlar hakkında genellikle sessizdir. Ancak Osmanlı mufassal tahrir defterleri, domuzlar ile domuzların ormanlarda otlatma üzerinde vergi yoluyla ormanların araştırma imkanını bize yol vermektedir – en azından domuz tarımı uygulanan Hıristiyan nüfusa sahip olan illerde. Bu makale, 16. ve 17. yüzyıllarda Slavonya bölgesinde olan üç Osmanlı sancak ile ilgilenmektedir: Sirem (*Syrmia*) Sancağı, Pojega (*Požega*) ile Pakraç (*Pakrac, Zaçasna* veya Çernik) Sancağı. Bu sancaklarda Hıristiyan nüfusu çoğunluğu temsil ettmiştir. Çok Slavonya yerleşiminde domuzlar üzerinde vergi yoluyla elde edilen para miktarı çok yüksek

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olmuştur. Domuzları meşe ve kayın ormanlarında otlattırıp düşmüş meşe palamudu yedirmek gerekli olmuştu. Varsayımımız, domuzların büyük sayıda olan yerleşimlerin çevresi meşe ve kayın ormanları ile yoğun kaplı olmasıdır. Böylece, Osmanlı Slavonya'nın domuz yetiştiriciliği nüfusunun mekânsal dağılımı Slavonya ormanlarının mekânsal dağılımına ilişkilendirilmektir. Karşılaştırma, detaylı Osmanlı vergi Osmanlı mufassal tahrir defterlerinde olan resm-i pelit vergi verilerine ve 1698 ile 1702 yılında Slavonya'da düzenlenmiş olan Habsburg nüfus sayımlarında ormanların yaklaşık dağılımına dayanan verilere dayanmakta ve açık korelasyon göstermektedir.

Anahtar Kelimeler: Osmanlı İmparatorluğu, Erken Modern Dönem, ormanlar, Slavonya, domuz yetiştiriciliği

Introduction and Methodology

The state of forests of the Ottoman Empire during the 16th and 17th centuries is a sparsely researched topic primarily because Ottoman sources are generally silent regarding forests in the mentioned period. However, Ottoman detailed tax surveys give us several leads on the possibility of researching forests. One lead is Ottoman taxes on pigs, especially the tax on their grazing in the forests (resm-i pelit). This tax was introduced in Ottoman provinces with considerable Christian (i.e., non-Muslim) population practicing pig farming. A good province to focus research on is the region of Slavonia, which is situated in the Western Balkans and was under Ottoman rule from 1526 to 1691, during which period Christian population represented a majority. This is why the amount of money obtained through tax on pigs, which the Christian villagers of Slavonia predominantly raised, was very high in numerous Slavonian settlements. In order to raise swine properly, villagers had to let them enter the forests surrounding their villages and eat acorns and beechmast. Raising the pigs this way reduced the cost of raising them. This activity is called pannage; it is the practice in which domestic pigs were fattened in oak and beech forests mainly from late September to December every year, and in some regions even until January. Oak and beech trees provided acorns and beechmast that fell from the branches and accumulated on the ground, after which pigs fed on them. During other months of the year, swine grazed the pastures surrounding the villages and were fed some other food, for instance, grain crops such as barley and wheat, as well as human food waste.

This practice was common in Europe since prehistory and continued to use it in southern Europe until the 20th century.¹ In early modern Europe, pannage was the primary means of raising swine and it depended on the availability of spacious oak and beech forests and water sources. Acorns and beechmast provided the cheapest and high caloric source of pig fodder and were essential for fattening and bringing pigs to slaughtering condition in winter. The tannin in acorns staved off diarrhea and improved the quality of the pig meat.

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¹ Daniel W. Gade, "Hogs (Pigs)," *The Cambridge World History of Food*, ed.: Kenneth F. Kiple and Kriemhild Conneè Ornelas, I, (Cambridge: Cambridge University Press, 2000), p. 537-538; Péter Szabó, "Historical interactions between oak and swine," *Trees, Forested Landscapes and Grazing Animals. A European Perspective on Woodlands and Grazed Treescapes*, ed.: Ian D. Rotherham (Abingdon: Routledge, 2013), p. 51; Ian Gordon Simmons, *Environmental History. A Concise Introduction* (Oxford: Blackwell, 1993), p. 87; Michael Palairet, *The Balkan Economies c. 1800-1914. Evolution without Development* (Cambridge: Cambridge University Press, 1997), p. 99; Dolly Jørgensen, "Pigs and Pollards: Medieval Insights for UK Wood Pasture Restoration," *Sustainability* 5 (2013), p. 389, 392.

Swine in forests also ate grass, tubers, roots, fungi, worms, frogs, mice, insects, slugs, larvae, and other small animals rich in protein to supplement their nutritional needs.²

Thus, the spatial distribution of the pig farming population can generally be linked to the spatial distribution of forests.³ The same presumption can be made for the forests of Ottoman Slavonia, i.e., that the surroundings of the settlements with huge number of pigs were covered with oak and beech forests. The aim of this paper will be to correlate the data on *resm-i pelit* tax in Ottoman detailed tax registers (*mufassal tahrir defterleri*) and on the data on pig farming and the approximate distribution of forests in Slavonia in the 1698 and 1702 Habsburg censuses of Slavonia, which will be explained later.

With regard to Slavonia, it was never a composite and clearly distinctive territory. The term Slavonia was established in the Middle Ages, when it used to designate the territory between the Drava, Sava and Danube rivers, excepting the territory of Syrmia, which is located further downstream toward the confluence of the latter two rivers. The Ottoman Empire extended its rule over parts of Slavonia in the years between 1526 and 1552 in a series of military campaigns. The Ottoman forces first penetrated Slavonia with the Hungarian military campaign of Sultan Suleiman the Magnificent in 1526, when only the utmost eastern parts of Slavonia were conquered. By 1540, the eastern and central parts of Slavonia were under control of the Ottomans and regular administration was introduced through the establishment of the Sancak of Syrmia (*Sirem*) and Sancak of Požega (*Pojega*), the latter comprising the biggest Slavonian section. After new Ottoman victories in western Slavonia, the border between the Habsburg and Ottoman Empires stabilized in 1552 in western Slavonia on the river Ilova, and in that area the Sancak of Pakrac was established.⁴ By the end of Ottoman rule in Slavonia in 1691, the territory delimitated by the four mentioned rivers began to be called Slavonia; this region will be the topic of this paper.⁵

² Palairet, *The Balkan Economies*, p. 359; Gordana Kralik et al., *Svinjogojstvo. Biološki i zootehnički principi. Udžbenik za studente poljoprivrednih fakulteta* (Osijek: Poljoprivredni fakultet u Osijeku, Sveučilište Josipa Jurja Strossmayera u Osijeku, 2007), 42; Paul Warde, *Ecology, Economy and State Formation in Early Modern Germany* (Cambridge: Cambridge University Press, 2006), p. 82; Franciscus W. M. Vera, *Grazing Ecology and Forest History* (Oxford: CABI Publishing, 2000), p. 125; Sam White, "From globalized pig breeds to capitalist pigs: a study in animal cultures and evolutionary history," *Environmental History* 16.1 (2011), p. 98; Jørgensen, "Pigs and Pollards," p. 388-389, 393.

³ J. Donald Hughes, *The Mediterranean*. *An Environmental History* (Santa Barbara: ABC Clio, 2005), p. 73; Nenad Moačanin, *Town and Country on the Middle Danube 1526-1690* (Leiden; Boston: Brill Publishing, 2006), p. 50, 61-62.

⁴ Ive Mažuran, *Hrvati i Osmansko Carstvo* (Zagreb: Golden marketing, 1998), p. 92-116.

⁵ Vjekoslav Klaić, *Povijest Hrvata od najstarijih vremena do svršetka XIX stoljeća*, V, (Zagreb: Nakladni zavod Matice hrvatske, 1988), p. 610; Moačanin, *Town and Country*, p. 9-10; compare: Géza Palffy, "The origins and development of the border defence system against the Ottoman Empire in Hungary (up to the early eighteenth century)," *Ottomans, Hungarians, and Habsburgs in Central Europe: The Military Confines in the Era of Ottoman Conquest*, ed.: Géza Dávid and Pál Fodor (Leiden; Boston; Köln: Brill, 2000), p. 11.

Slavonia was relatively sparsely populated and covered with thick forests.⁶ Oak and beech trees (*Quercus robur* and *Fagus sylvatica*), among other species, grew throughout Slavonia, as well as throughout the Pannonian (or Carpathian) Basin, of which Slavonia is its southwestern border.⁷ The high concentration of pig farming in Slavonia (as well as Syrmia in its western part) is associated with the presence of these thick oak and beech forests and marshes, which were used for pig grazing.⁸ The importance of pannage for the Slavonian pig-raising population can be estimated based on the conclusions by Péter Szabó on pannage activities in the Pannonian Basin: in practice, existence of an acorn-bearing forest signified a forest in which pannage was practiced.⁹

Did pig farming have a negative effect on Slavonian forests during Ottoman rule? One of the most common ways in which Slavonian peasants impeded natural reforestation (not taking into account forest felling) was through pannage as previously described. This practice is what caused the interruption of natural renewal of forests due to the damage to coppice regrowth and other ground flora that the pigs ate. Swine fed on acorns and beechnuts that otherwise could have germinated and grown into full trees. The scope of damage was accentuated in years when mast was less abundant on forest ground than usual; swine would then eat more ground flora and less seeds would have the chance to sprout and grow into trees. However, this process was slow and had only a marginal effect.¹⁰ Furthermore, pasturing of swine in the forests was possible only on the outskirts of (in early modern Slavonia generally) dense virgin forests – thus the damage was lesser.¹¹

There are a number of Ottoman taxes concerning pig farming: *resm-i hunzır* or *hanazır*, i.e., general tax on pigs;¹² *resm-i bojik*, i.e., tax on slaughtering of swine; *resm-i pelit* or *pellut*, i.e., tax on swine that spent nights grazing in forests. The latter tax is the most useful because it precisely determines the number of pigs that were driven into forests, and we will

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⁶ Evliyâ Çelebi bin Derviş Mehemmed Zillî, Evliyâ Çelebi Seyahatnâmesi Topkapı Sarayı Kütüphanesi Bağdat 307 Numaralı Yazmanın Transkripsiyonu – Dizini, V, ed.: Yücel Dağlı, Seyit Ali Kahraman, İbrahim Sezgin, (Istanbul: Yapı Kredi Yayınları, 2001), p. 272; Moačanin, Town and Country, p. 150. ⁷ Szabó, "Historical interactions," p. 52.

⁸ Bruce McGowan, Sirem Sancağı Mufassal Tahrir Defteri (1566-1574), (Ankara: Türk Tarih Kurumu Basımevi, 1983), p. LXVIII.

⁹ Szabó, "Historical interactions," p. 52-54.

¹⁰ Emil Klimo, "History, Condition and Management of Floodplain Forest Ecosystems in Europe," *Environmental Forest Science: Proceedings of the IUFRO Division 8 Conference Environmental Forest Science, held 19-23 October 1998, Kyoto University, Japan,* ed.: Kyoji Sassa (Dordrecht: Kluwer Academic Publishers, 1998), p. 175; Simmons, *Environmental History*, p. 84; Selçuk Dursun, "Forest and the State: History of Forestry and Forest Administration in the Ottoman Empire" (PhD diss.), Sabancı University, 2007, p. 36; Jørgensen, "Pigs and Pollards," p. 395.

¹¹ Raphael Zon, "Forests and human progress," Geographical Review, 10.3 (1920), p. 155.

¹² The name for this tax is interesting because in all Ottoman tax registers that have been recorded after the 1540s (and this is the period in which Croatian lands, including the region of Slavonia, were conquered by the Ottomans) all financial terms regarding the tax on pigs have been replaced with the standard Arabic term: resm-i hunzır. This was due to a surge of Arabic terms linked with the prevalence of Arabic-speaking state servants after the Ottoman conquest of many Arab lands in 1517. Therefore, an Arabic term started to be used for this un-Islamic practice, i.e., recording the tax on swine in Christian regions of the Empire. Heath W. Lowry, *The Nature of the Early Ottoman State*, (Albany: State University of New York Press, 2003), p. 113; Moačanin, *Town and Country*, p. 141.

use it in our comparison. Ottoman detailed tax registers for the Slavonian sancaks demonstrate that, in accordance with the prevalence of pig farming and pannage activities throughout Slavonia, resm-i pelit was collected in the Sancaks of Požega and Syrmia.¹³ With regard to western Slavonia and the Sancak of Pakrac, it was also covered with thick forests, and a high concentration of pig farming and pannage activities was to be expected. The 1698 Habsburg census describes immense areas of acorn-bearing forests throughout the territory of the former Sancak of Pakrac.¹⁴ However, kanunnames of the two mufassal defters of the Sancak of Pakrac conducted in 1565 and 1584 do not mention resm-i pelit.15 This fact is not peculiar, since this sancak almost in its entirety was regarded as an Ottoman border zone called *serhat*, meaning that the inhabitants of the *sancak* were exempted from most taxes, here apparently including resm-i pelit as well. 16 The same tax exemption was present in certain parts of the Sancaks of Požega and Syrmia due to the need to exempt pass keepers (derbentçiler) and bridge keepers and repairers (köprücüler) that were assigned by Ottoman authorities with the task of guarding and repairing bridges situated in impassable forests in exchange for a certain (or sometimes complete) amount of tax exemption.¹⁷ As regards resm-i pelit and its mentions in the Slavonian defters, the aforementioned kanunnames for the Sancaks of Požega and Syrmia reveal that Ottoman tax collectors demanded one akçe per every swine that was staying overnight in oak and beech forests.¹⁸

Our proposed method of comparing the spatial distribution of the pig farming population and their pannage activities and the spatial distribution of Slavonian forests has already been proposed or at least hinted at by other researchers of Ottoman and post-Ottoman Slavonia, namely Nenad Moačanin and Milan Vrbanus, although they have not proceeded to analyze this correlation more closely. Moačanin stressed the importance of pannage for pig raising and determined that the Christian settlements of Slavonia with the biggest production of pig meat *per capita* were eastern Slavonian settlements Gorjani and Sveti Đurađ. The *varoş* of Gorjani's extraordinary *per capita* production is what compelled Moačanin to presume that in the mentioned *varoş* specialization in production was the case. For us it is important that Gorjani inhabitants practiced pannage in oak forests and paid a

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¹³ Türkiye Cumhuriyeti Başbakanlık Devlet Arşivleri Genel Müdürlüğü (TCBDAGM), Osmanlı Arşivi Daire Başkanlığı (OADB), Tapu Tahrir (TT), Tapu Tahrir Defterleri (TTD), 203, 204, 243, 351, 549, 612, 672; McGowan, *Sirem Sancağı*, p. 4.

¹⁴ Ive Mažuran, *Popis naselja i stanovništva u Slavoniji 1698. godine*, (Osijek: Radovi Zavoda za znanstveni rad JAZU-a u Osijeku, 1988), *passim*.

¹⁵ TCBDAGM, OADB, TT, TTD, 355, 359.

¹⁶ Moačanin, *Town and Country*, p. 127, 147-148.

¹⁷ TCBDAGM, OADB, TT, TTD, 672; Moačanin, *Town and Country*, p. 127, 153, 157, 172; Nenad Moačanin, *Slavonija i Srijem u razdoblju osmanske vladavine*, (Slavonski Brod: Hrvatski institut za povijest, Podružnica za povijest Slavonije, Srijema i Baranje, 2001), p. 56, 116; Nenad Moačanin, *Turska Hrvatska*. *Hrvati pod vlašću Osmanskoga Carstva do 1791*. *Preispitivanja*, (Zagreb: Matica hrvatska, 1999), p. 92, 120-121; Nenad Moačanin, "Pristup ekohistoriji Podravine prema osmanskim izvorima," *Ekonomska i ekohistorija*. Časopis za gospodarsku povijest i povijest okoliša, 1 (2005), p. 142-143.

¹⁸ TCBDAGM, OADB, TT, TTD, 203, 204, 243, 549, 612, 672; McGowan, *Sirem Sancağı*, p. 4; Stjepan Sršan, *Popis Sandžaka Požega* 1579. *godine*, (Osijek: Državni arhiv u Osijeku, 2001), p. 21; Shota Bekadze, "XVI. yüzyılda Raça Nahiyesi," *Turkish Studies – International Periodical for the Languages, Literature and History of Turkish or Turkic*, 9.5 (2014), p. 409.

¹⁹ Moačanin, *Town and Country*, p. 24-25, 61-64; Milan Vrbanus, "Ratarstvo u slavonskoj Posavini krajem 17. stoljeća," *Scrinia Slavonica* 2 (2002), p. 206-207.

high amount of *resm-i pelit*.²⁰ Vrbanus also emphasized the connection between oak and beech forests of Slavonia and the practice of pannage. Furthermore, he determined that at the end of the 17th century some Slavonian counties, for instance Brod, Slobodnica, Kobaš, and Našice, had the biggest percentage of oak and mixed forests in the region; at some places, they represented as much as 2/3 of the whole forest fund of a county, and thus those counties had the best prerequisites for the development of pig farming.²¹

Comparison of Ottoman and Habsburg Tax Surveys

We cannot compare the distribution of Slavonian forests during Ottoman rule and the state of forests today because much has changed in the state of forests of Slavonia in the last centuries, especially in the 19th century, when Slavonian forests experienced rapid deforestation due to exploitation for industrial purposes.²² Our source for comparison of the distribution of forests will be, on the one hand, the 1579 mufassal defter of the Sancak of Požega because it is the last known Ottoman mufassal defter for the biggest Slavonian sancak, and on the other hand, the Slavonian censuses conducted by the Habsburg authorities in 1698 and 1702,23 i.e., soon after the end of Ottoman rule in Slavonia. This comparison is adequate because Ottoman rule did not have a detrimental effect on the state of Slavonian forests; thus it stayed almost the same during the 16th and 17th centuries.²⁴ The Habsburg censuses indicate, among other things, the type, quality, and distribution of Slavonian forests at the time. The censuses, which were written in Latin, for every surveyed settlement indicate if it had (or not) a silva glandinosa or glandifera, i.e., an acorn- and/or beechmastbearing forest. A part of the censuses are very detailed and even provide the number of swine (and other animals) in the Slavonian settlements. In the table below is (in the first box on the left) a list of settlements listed in the 1579 detailed tax register with at least some amount of resm-i pelit tax due to the Ottoman authorities, and (in the other three boxes) a list of information for those same settlements as they are presented in the 1579 Ottoman survey and in the 1698 and 1702 Habsburg censuses. The settlement names are listed as they appear today. It was not possible to locate some acorn- or beechmast-bearing forests by comparing the data in the Ottoman defter and in Habsburg surveys because the village to which the forest was adjacent disappeared for whichever reason (usually abandonment) before the Habsburg censuses were carried out, or the Habsburg authorities did not include the village in either of the censuses. It is due to these two reasons that the mentioned Ottoman villages have not been included in the table.

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²⁰ Moačanin, *Town and Country*, p. 24-25, 50, 61-64.

²¹ Milan Vrbanus, "Društveno-ekonomske prilike u Brodu i brodskoj okolici krajem 17. i početkom 18. stoljeća," *Franjevci u Slavonskom Brodu. Zbornik radova znanstvenog skupa održanog 27. listopada 2007. u Slavonskom Brodu*, ed.: Dino Mujadžević (Slavonski Brod: Hrvatski institut za povijest – Podružnica za povijest Slavonije, Srijema i Baranje, 2012), p. 24-25; Mažuran, *Popis naselja*, p. 140, 149-150, 153, 157, 162-165, 168-175; Vrbanus, "Ratarstvo u slavonskoj Posavini," p. 206-207, 232.

²² For more on this topic, see: Damir Matanović, "Legalitet i legitimitet – suprotstavljene koncepcije pri iskorištavanju šuma Slavonske vojne krajine," Časopis za suvremenu povijest, 35.3 (2003), p. 961-970.

²³ For more on this topic, see: Mažuran, *Popis naselja*, p. 11-16.

²⁴ Anđelko Vlašić, "Iskorištavanje šuma u Slavoniji u osmanskom razdoblju," *Scrinia Slavonica*, 16 (2016), p. 86.

settlement name	1579 Ottoman tax	1698 Habsburg	1702 Habsburg
	survey	census	census
Doljanovci	resm-i pelit was	50 acres of acorn-	mountainous acorn-
	collected; amount	bearing forests ²⁶	bearing forests ²⁷
	unknown ²⁵		
Vetovo	resm-i pelit was	"acorn-bearing	
	collected; amount	forests extend for 1/4	
	unknown ²⁸	of an hour" of	
		walking distance ²⁹	
Sulkovci	resm-i pelit was	25 acres of forests	56 acres of forests
	collected; amount	used only for	for firewood ³²
	unknown ³⁰	firewood ³¹	
Kadanovci	80 akçes of resm-i	14 pigs in the village	19 pigs in the
	pelit ³³	surrounded by	village; 66 acres of
		forests ³⁴	acorn-bearing
			forests ³⁵
Dobrogošće	resm-i pelit was	30 acres of forests	50 acres of acorn-
	collected; amount	used only for	bearing forests ³⁸
	unknown ³⁶	firewood ³⁷	
Buk (near Svilna)	450 akçes of resm-i	12 pigs in the village	
	pelit ³⁹	surrounded by	
		acorn-bearing	
		forests ⁴⁰	
Jurakovac	resm-i pelit was		45 pigs in the
	collected; amount		village; no data on
	unknown ⁴¹		forests ⁴²
Granje	resm-i pelit was	a small forest used	36 acres of forests
	collected; amount	only for firewood44	used only for
	unknown ⁴³		firewood ⁴⁵

²⁵ Sršan, Popis Sandžaka Požega 1579. godine, p. 34.

²⁶ Mažuran, *Popis naselja*, p. 364.

²⁷ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 155-156.

²⁸ Sršan, Popis Sandžaka Požega, p. 40.

²⁹ Mažuran, *Popis naselja*, p. 310.

³⁰ Sršan, Popis Sandžaka Požega, p. 47.

³¹ Mažuran, *Popis naselja*, p. 200.

³² Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 207.

³³ Sršan, Popis Sandžaka Požega, p. 62.

³⁴ Mažuran, *Popis naselja*, p. 273.

³⁵ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 197.

³⁶ Sršan, *Popis Sandžaka Požega*, p. 69.

³⁷ Mažuran, Popis naselja, p. 294.

³⁸ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 187.

³⁹ Sršan, Popis Sandžaka Požega, p. 77.

⁴⁰ Mažuran, *Popis naselja*, p. 276.

⁴¹ Sršan, Popis Sandžaka Požega, p. 82.

⁴² Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 156.

forests along the	2000 akçes of resm-i	96 pigs in	
Mrsunja river (near	pelit ⁴⁶	Slobodnica and 100	
Slobodnica)		acres of oak forests47	
Kuti Trnjanski and	370 akçes of resm-i	205 pigs and 150	
Kopanica	pelit ⁴⁸	acres of oak forests49	
Podcrkavlje	resm-i pelit was	about 200 acres of	
	collected; amount	mixed forests ⁵¹	
	unknown ⁵⁰		
Gornji Slatinik	resm-i pelit was	5 acres of acorn-	
	collected; amount	bearing forests ⁵³	
	unknown ⁵²		
Sredanci	resm-i pelit was		"acorn-bearing
	collected; amount		forests extend for 1
	unknown ⁵⁴		hour of walk in
			longitude and ½ of
			an hour in
			latitude"55
Gornja Bebrina	1545 akçes of resm-i	10 acres of forests	
	pelit ⁵⁶	used for firewood ⁵⁷	
Jošava	940 akçes of resm-i		62 pigs in the
	pelit ⁵⁸		village; 700 acres of
			acorn-bearing
			forests ⁵⁹
Gorjani	1500 akçes of resm-i		1800 acres of acorn-
	pelit ⁶⁰		bearing forests ⁶¹
Podgorač	50 akçes of resm-i		"immeasurable"
	pelit ⁶²		

⁴³ Sršan, *Popis Sandžaka Požega*, p. 83.

⁴⁴ Mažuran, *Popis naselja*, p. 316.

⁴⁵ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 168.

⁴⁶ Sršan, Popis Sandžaka Požega, p. 107.

⁴⁷ Mažuran, *Popis naselja*, p. 172.

⁴⁸ Sršan, Popis Sandžaka Požega, p. 113.

⁴⁹ Mažuran, *Popis naselja*, p. 125.

⁵⁰ Sršan, *Popis Sandžaka Požega*, p. 117.

⁵¹ Mažuran, *Popis naselja*, p. 164.

⁵² Sršan, Popis Sandžaka Požega, p. 121.

⁵³ Mažuran, *Popis naselja*, p. 168.

⁵⁴ Sršan, *Popis Sandžaka Požega*, p. 141.

⁵⁵ Ive Mažuran, *Popis zapadne i srednje Slavonije 1698. i 1702. godine*, (Osijek: Historijski arhiv u Osijeku, 1966), p. 145.

⁵⁶ Sršan, *Popis Sandžaka Požega*, p. 145-146.

⁵⁷ Mažuran, *Popis naselja*, p. 100.

⁵⁸ Sršan, *Popis Sandžaka Požega*, p. 157.

⁵⁹ Mažuran, *Popis zapadne i srednje Slavonije*, p. 135-136.

⁶⁰ Sršan, Popis Sandžaka Požega, p. 160.

⁶¹ Smičiklas, Dvijestogodišnjica oslobođenja, p. 317; Mažuran, Popis zapadne i srednje Slavonije, p. 106.

		acorn-bearing
		forests ⁶³
Ceremošnjak	775 akçes of resm-i	no more acorn-
	pelit ⁶⁴	bearing forests65
Dubravnik and Topolje	1599 akçes of resm-i	6 pigs in Dubravnik;
	pelit ⁶⁶	200 (or 300) acres of
		acorn-bearing and
		firewood forests;
		2475 acres of acorn-
		bearing forests ⁶⁷
Bučje	650 akçes of resm-i	"When the acorns
	pelit ⁶⁸	ripen, they could
		raise about 1000
		pigs"69
Levanjska Varoš	553 akçes of resm-i	75 pigs and 3500
	pelit ⁷⁰	acres of acorn-
		bearing forests ⁷¹
Hrkanovci Đakovački	resm-i pelit was	50 pigs and 2200
	collected; amount	acres of acorn-
	unknown ⁷²	bearing forests ⁷³
Selci Đakovački	250 akçes of resm-i	42 pigs and 525
	pelit ⁷⁴	acres of acorn-
		bearing forests ⁷⁵
Slobodna Vlast	29 akçes of resm-i	96 pigs and 185
	pelit ⁷⁶	acres of acorn-
		bearing forests ⁷⁷
Subotica	4020 akçes of resm-i	"great acorn-bearing
	pelit ⁷⁸	forests extend for
		1/2 of day of walk

⁶² Sršan, Popis Sandžaka Požega, p. 179.

⁶³ Smičiklas, Dvijestogodišnjica oslobođenja, p. 317; Mažuran, Popis zapadne i srednje Slavonije, p. 281.

⁶⁴ Sršan, Popis Sandžaka Požega, p. 187.

⁶⁵ Mažuran, Popis naselja, p. 91.

⁶⁶ Sršan, Popis Sandžaka Požega, p. 207-208.

⁶⁷ Smičiklas, Dvijestogodišnjica oslobođenja, p. 314, 326-327; Mažuran, Popis zapadne i srednje Slavonije, p. 125.

⁶⁸ Sršan, Popis Sandžaka Požega, p. 215-216.

⁶⁹ Smičiklas, Dvijestogodišnjica oslobođenja, p. 321; Mažuran, Popis zapadne i srednje Slavonije, p. 115.

⁷⁰ Sršan, *Popis Sandžaka Požega*, p. 221.

⁷¹ Smičiklas, Dvijestogodišnjica oslobođenja, p. 323; Mažuran, Popis zapadne i srednje Slavonije, p. 119.

⁷² Sršan, *Popis Sandžaka Požega*, p. 225.

⁷³ Smičiklas, Dvijestogodišnjica oslobođenja, p. 325; Mažuran, Popis zapadne i srednje Slavonije, p. 123-124.

⁷⁴ Sršan, Popis Sandžaka Požega, p. 227.

⁷⁵ Mažuran, Popis zapadne i srednje Slavonije, p. 128.

⁷⁶ Sršan, *Popis Sandžaka Požega*, p. 227.

⁷⁷ Smičiklas, Dvijestogodišnjica oslobođenja, p. 324; Mažuran, Popis zapadne i srednje Slavonije, p. 119.

⁷⁸ Sršan, Popis Sandžaka Požega, p. 267.

			in longitude and 1
			day in latitude" ⁷⁹
Breštanovci	2327 akçes of resm-i	no acorn-bearing	no acorn-bearing
	pelit ⁸⁰	forests ⁸¹	forests82
Čačinci	266 akçes of resm-i	11 pigs in the	57 pigs in the village
	pelit ⁸³	village; acorn-	and "great forests"85
		bearing forests ⁸⁴	
Krajna	4000 akçes of resm-i	300 acres of acorn-	41 pigs in the village
	pelit ⁸⁶	bearing forests ⁸⁷	"among great
			forests"88
Stara Jošava	452 akçes of resm-i	26 pigs and 300	
	pelit ⁸⁹	acres of acorn-	
		bearing forests ⁹⁰	
Donja Motičina	800 akçes of resm-i	333 acres of acorn-	
	pelit ⁹¹	bearing forests ⁹²	
Pritisnica	1000 akçes of resm-i	acorn-bearing	
	pelit ⁹³	forest ⁹⁴	
Rakitovica	450 akçes of resm-i	about 150 acres of	65 pigs and 100
	pelit ⁹⁵	acorn-bearing	acres of acorn-
		forests ⁹⁶	bearing forests97
Brod (near Valpovo)	3090 akçes of resm-i	50 acres of acorn-	
	pelit ⁹⁸	bearing forests ⁹⁹	
Kopanovci	4750 akçes of resm-i	300 acres of acorn-	
	pelit ¹⁰⁰	bearing forests ¹⁰¹	
Stara Brezovica	450 akçes of resm-i	"acorn-bearing and	

⁷⁹ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 130.

⁸⁰ Sršan, Popis Sandžaka Požega, p. 267.

⁸¹ Mažuran, *Popis naselja*, p. 421.

⁸² Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 284.

⁸³ Sršan, Popis Sandžaka Požega, p. 307-308.

⁸⁴ Mažuran, Popis naselja, p. 417.

⁸⁵ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 279.

⁸⁶ Sršan, Popis Sandžaka Požega, p. 320-321.

⁸⁷ Mažuran, Popis naselja, p. 405.

⁸⁸ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 273.

⁸⁹ Sršan, Popis Sandžaka Požega, p. 312.

⁹⁰ Mažuran, Popis naselja i stanovništva, p. 402, 405.

⁹¹ Sršan, Popis Sandžaka Požega, p. 314.

⁹² Mažuran, Popis naselja, p. 409.

⁹³ Sršan, Popis Sandžaka Požega, p. 319.

⁹⁴ Mažuran, *Popis naselja*, p. 413.

⁹⁵ Sršan, Popis Sandžaka Požega, p. 338.

⁹⁶ Mažuran, Popis zapadne i srednje Slavonije, p. 50.

⁹⁷ Smičiklas, *Dvijestogodišnjica oslobođenja*, p. 104.

⁹⁸ Sršan, Popis Sandžaka Požega, p. 340.

⁹⁹ Mažuran, Popis zapadne i srednje Slavonije, p. 48.

¹⁰⁰ Sršan, Popis Sandžaka Požega, p. 358.

¹⁰¹ Mažuran, Popis zapadne i srednje Slavonije, p. 55.

pelit ¹⁰²	firewood forests	
	extend for 1 and ½	
	of an hour" of	
	walk ¹⁰³	

Conclusion

The comparison made in the above table demonstrates clear correlation between the spatial distribution of pig farming settlements of Ottoman Slavonia and the distribution of Slavonian forests, i.e., that the surroundings of the settlements with the biggest number of pigs were heavily covered with oak and beech forests. Although our chosen sources enable us to only approximately situate the forests of Ottoman Slavonia, they still give us the opportunity to locate the disappeared forests transformed into agricultural fields after the end of Ottoman rule and explain how the way of life of local population during Ottoman times was influenced by the forests in their vicinity. This will be the focus of our future research.

These conclusions could also be applied to other Ottoman provinces in the Balkans that had a significant Christian population, for instance, the *sancaks* on the territory of Hungary, Serbia, Bosnia, and other modern countries, and I hope that this paper made a small contribution to this topic.

¹⁰² Sršan, Popis Sandžaka Požega, p. 377-378.

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¹⁰³ Mažuran, Popis zapadne i srednje Slavonije, p. 69.

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