

Annals of Agrarian Science

Journal homepage: http://journals.org.ge/index.php



Vine culture in meskheti in old population gensus books

Dali Nikolaishvili^{a*}, Davit Sartania^b, Roin Malakmadze^c, Manana Kvetenadze^a

^aIvane Javakhishvili Tbilisi State University, Faculty of Exact and Natural Sciences, Department of Geography, 3, Ilia Chavchavadze, Ave., Tbilisi, 0179, Georgia

^bIvane Javakhishvili Tbilisi State University, Museum of TSU, 3, Ilia Chavchavadze Ave., Tbilisi, 0179, Georgia ^cBatumi Shota Rustaveli State University, Niko Berdzenishvili Research Institute, 32/35, Rustaveli/Ninoshvili Ave., Batumi, 6010, Georgia

Received: 05 June 2019; accepted: 02 October 2019

ABSTRACT

The article considers the areas of vine-growing in Meskheti covering not only the part of Meskheti on the territory of present-day Georgia, but also beyond it – the basins of the middle and upper reaches of the rivers Chorokhi and Mtkvari. The study used several population census books drafted for fiscal purposes during the Ottoman reign and giving the valuable social-economic data about the part of the territory of Georgia occupied by the Ottomans. The study demonstrated that vine grew only in few villages of Meskheti, though it must have been one of the leading cultures before the Ottoman domination. This is evidenced by the old Turkish population census books, which make it clear that vineyards were sparsely scattered on the territory of the whole Governorate and grew in the Nahiyesis and couple of villages much distanced from one another. Such a scattered location of vineyards is undisputable evidence of vine-growing being well developed in this region at some time in the past. Today, most of the villages where people commonly grow vine are on the territory of modern Georgia (Samtskhe-Javakheti, Ajara). However, today, vine-growing is not developed in most of them. It is typical that vine grew even further south, in the upper reaches of the Chorokhi River and in the basins of the rivers Oltisistskali, Banistskali and Bardusistskali (presently, in Turkey).

Keywords: Vine, Viticulture, Population census books, Georgia, Meskheti, Ottoman domination.

*Corresponding author: Dali Nikolaishvili; E-mail address: dali.nikolaishvili@tsu.ge

Introduction

Historical-geographical and historical-cartographical studies have a long history in Georgia. However, there is still a series of questions not studied to date. Unfortunately, most such studies are focused on a single discipline - on history and do not highlight the questions belonging to other fields and also at the intersection of different sciences. Neither do they make use of modern technologies.

Historical cartography, as the discipline developed on the brink of cartography and geography, aims at compiling maps and atlases, developing the methods of their compilation and analyzing the peculiarities of the territorial allocation of the objects plotted on the maps. However, historical cartography in Georgia can be considered a less developed discipline. One direction of historical cartography, which is creating a retrospective picture of the political situation, is more developed. It is many decades now, the historical maps with teaching, scientific or reference-and review purposes have been compiled in Georgia, but they are mostly historical-political. They depict the political situation of the past only – the territories of Georgia and its adjacent countries in different historical periods. We have no historical-physical-geographical, historical-demographic, historical-economic, historical-ethnographic, cultural-historical or other types of historical maps of the territories of Georgia and its adjacent territories, and consequently, there are no methods duly developed to compile them.

Historical cartography allows creating a retrospective picture of various political and social-economic processes and identifying the types of rational nature use in the past. Such studies are important not only for providing a retrospective review, but also for identifying the traditional knowledge and experience bringing the economic benefit to the population in the past what can be used efficiently even today. Vine culture is one of them.

Historically, Meskheti covered the basins of the middle and upper reaches of the rivers Mtkvari, Chorokhi and its tributaries. Historically, more than one regions of Georgia were located here. Ivane Javakhishvili called them communities. These communities are: Artaani, Ajara, Erusheti, Tori, Klarjeti, Kola, Lazeti, Ligani, Oltisi, Palakatsio, Samtskhe, Tao, Potskhovi, Shavsheti, Javakheti and others. They cover quite a vast area, with only small part of it being a part of Georgia at present, and as per the modern administrative division of Georgia, it presents two regions only – Samtskhe-Javakheti and Ajara.

On the territory of modern Meskheti, vine grows only in very limited areas and vine-growing, as a branch, is developed in some areas only (only in Samtskhe, in the lower part of Akhaltsikhe basin slopes). However, the situation is absolutely different in a historical context. It is known that historically vine was quite widely spread on the territory of Meskheti. Besides, vine was widely grown not only on the territory of Meskheti being a part of modern Georgia, but also beyond the borders of the country. This fact was referred to in many scientific and scientific-popular literary sources. However, the exact area occupied by vineyards in the past is not still identified exactly.

Methods and initial data

An important original source to create a retrospective picture of vine-growing areas in the past is old Turkish population census books. In this respect, in our view, particularly important are some population census books drafted for fiscal purposes by the Ottoman authorities. They are:

- "The Grand Book of Gurjistan Governorate", dated by 1574 [1];
- "The Grand Book of Gurjistan Governorate", dated by 1595 [2];
- "Big and Brief Books of Ajara Liva (District)"
 [3];
- "Great old census book of Tbilisi Governorate" of 1728 [4].

These documents describe the period when

the Meskheti was a part of Ottoman Empire as a Governorates (Vilaetis, Provinces) and give a real picture describe the situation at the moment of censuses quite accurately. Today, a certain part of this territory is included in Adjara, Samtskhe-Javakheti, while another part of it rests beyond the borders of Georgia (Artaani, Klarjeti, Kola, Lazeti, Potskhovi, Shavsheti, Tao, Tortumi, etc.). All of these documents are valuable for different specialists such are: historians, geographers, demographers, economists, linguists and etc.

The research was accomplished based on the interdisciplinary studies. The study was oriented on compiling thematic maps. For this purpose, the data in the old census books were ranked and classified; designing GIS database and relevant legend and compiling a series of thematic maps. The objects given on the map were identified by comparing them to other sources. This will be done by means of comparative, semantic, retrospective mapping and other methods of study. A geographical-cartographic analysis of the objects included in the old census books have been done.

The old cartographic sources, unlike modern maps, were compiled in a different metric system and their analysis needs absolutely different approaches. Virtually, no such practice has ever been used in Georgia. For this purpose, the methodology of GIS-registration and combination of the old with the modern cartographic basis was developed.

Main results

Peculiarities of territorial distribution of vine

The scientific literature gives much abundant data about the vine-growing areas on the territory of Meskheti, which is a part of present-day Georgia. Different sources [5-11] give different numbers of the vine cultivars. Taking into consideration numerous sources we have registered 59 vine cultivars in this region. Compared to other regions of Georgia this one is just poor in the quantity of cultivars but very significant for it's a boriginal vine varieties By the areas and density of vineyards Meskheti is not a prominent region and it lags behind other regions as Samegrelo, Imereti, Kakheti and etc. [12]. It is clear that direct duplication of the present-day situation in the past cannot be right. However, by considering the natural conditions, the general state of affairs must be similar in the past and at present. In any case, the climatic conditions on the territory of present-day Georgia supported vine-growing both, in the past and at present more than in the areas located further south in the country, where the mountainous relief and severe climate of the South Caucasus do not favor vine-growing.

In 1574, the Great Register of Gurjistan Governorate names vineyards in thirty out of more than 1000 Georgian villages what, at the first sight, must be the sign of poor distribution of vine in the area. However, if taking a closer look at the territorial distribution of the vineyards, we will see that they grew in the Nahiyesis, which were much distanced from one another (Artanuji, Didi Artaani, Tortomi, Oltisi) and in a couple of villages. Such a scattered nature must be undoubted evidence of vine-growing being well developed in this region in the past, while few sites with vine survived by 1574 must be viewed as relict remnants of the branch well developed in the past. What is the reason for making such a conclusion? Purportedly, the villages located almost in the same natural conditions had the same economic structure and specialization, i.e. if vine-growing was developed in one village, the same would be true for its neighboring villages. Otherwise, it is impossible to explain such a scattered nature of the vineyards. At the same time, we may suppose that vine was survived in some other villages, of which the Register says nothing. In this instance, we mean individual vine plantings (perhaps, high-growing vineyards), which were not taxed due to very little harvest they gave. The reason for such a conclusion is the great many feral vines found on certain territories of Meskheti, presently within the borders of Georgia, where no vine grows at present.

A similar discourse will be fair for the Great Register of Gurjistan Governorate of 1595, according to which vine grew all over the given area, including Javakheti. It is noteworthy that in respect of the number and development of vineyards, out of 9 Livas of the Governorate, Akhalkalaki Liva ranked the fourth in Meskheti" [13]. Most of the villages where vine grew commonly are on the territory of present-day modern Georgia, though presently, vine-growing is not developed in most of them. Large areas with vineyards survived in Khertvisi and Akhaltsikhe Nahiyesis (Fig. 1). The vineyards in these areas have survived even to our days, what is hardly true with the territories near the southern border of Georgia, e.g. Akshehiri, Tmogvi or and Nialiskure Nahiyesis. Even A more interesting fact is that vine grew even further southwards, in the upper reaches of the Chorokhi River and in the basins of the rivers Oltisistskali, Banistskali and Bardusistskali (presently, in Turkey). Not only doesn't vine grow there, but the area does not offer any favorable climatic conditions for vine-growing.

In some instances, old Turkish Population census books allow identifying the number of vineyards in

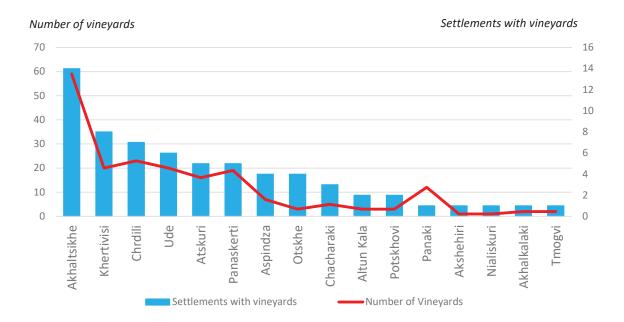


Fig. 1. Distribution of vineyards in Meskheti according to old Turkish Population census books

different villages and amount of taxes imposed to them. For instance, according to the Register of 1595, there were over 100 vineyards in the Governorate. Today, it is very difficult to determine the size of these plots; however, the taxes imposed to them give us a certain idea about the kind of soils and crop capacity of vine growing in such areas. So, we want to say that no fixed tax was imposed to each vineyard. The difference was seen among the villages as well and even on the territory of a single village. In particular, in village Nurmirba (the same as Buzmareti), which was located in Panaskerti Nahiyesi of Didi Artaani Liva, one vineyard was evaluated to 40 akce, while it was evaluated to 50 and 60 akee at other locations. There were also the vineyards presumably giving very rich harvest. For instance, a half of one vineyard was evaluated to 48 akçe, i.e. 96 akçe for the whole plot. The factors used to determine the amount of tax can be assumed quite accurately - first of all, it was the crop capacity. This, first of all, depended on the grape variety and soil fertility.

The Register of Zemo Ajara also evidenced that vineyards were commonly grown there too, but not in very large areas. It is typical that at that time, vine grew on the territory of present-day Khulo Municipality. Such territories are villages Skhalta and Khula (the same as Khulo), where the tax for vineyards was 200 and 150 akce, respectively. It should be noted that administratively, Zemo Ajara Liva of that time was divided into two units: Kvemo Ajara and Zemo Ajara Nahiyesis. Vine was not even mentioned in Kvemo Ajara, which was located more in the lower reaches of the Ajaristskali River, while several areas with vineyards were mentioned in Zemo Ajara Nahiyesi. It is without a doubt that vine was grown in other villages of Ajara located at lower hypsometric heights; however, the given Register gives data only about certain territories of present-day Ajara. The Sea coastal area and subtropical zone are not included in such territories, where vine-growing is one of the well-developed branches at present.

The Register of 1728 gives an absolutely different picture, with quite high vineyard taxes. This can be explained in two ways. First of all, the given Register was written two centuries later when the purchasing power of akçe could have been changed. On the other hand, the influence of the Ottoman economic policy was less in this area and consequently, the local people retained more vineyards. Some villages paid even 2000 akçe for vineyards (e.g. villages of Petre Nahiyesi: Zanavi, Zemo Rveli, Kortaneti, Nua, etc.). It is also interesting that in some villages, vineyard tax ranked the second after the grain tax and made almost 25% of all economic taxes (Fig. 2).

One can cite other sources too evidencing the common nature of vine-yards in Meskheti, e.g. data by Vakhushti Bagrationi [14] and map compiled by Ivane Javakhishvili on their basis [9]. As it seems, the gorge of almost all upper, middle and lower reaches of the Chorokhi River (near the river) is occupied by vineyard-and-fruity area. This is hardly true with the River Mtkvari basin, where the vineyard-and-fruity areas were found within the borders of Kvemo Kartli and Shida Kartli lowlands, Borjomi Gorge and Akhaltsikhe Basin.

One of the historical records evidences that the vineyards grew in Akhalkalaki uyezd (district): "As Balas states, in 1895, 10 vineyards with the area of 3 desiatina (3,27 ha) were registered in Akhaltsikhe uyezd and there were 3 vineyards registered in Akhalkalaki uyezd" [6].

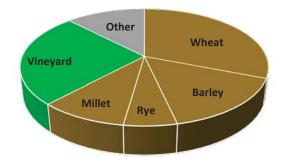


Fig. 2. Taxes in village Nua (as per Tbilisi Register of 1728)

In Meskheti, including the territory of historical Georgia, vine also grew over quite large areas in the Mtkvari River gorge – from Khretvisi to Artaani [15].

According to the villages incorporated in the old Turkish Population census books, it became possible to determine the hypsometric distribution of vineyards. By fixing the absolute heights of these villages, it was identified that vine in Meskheti grew at absolutely different heights within a quite large vertical range. For instance, in Ajara vine grows within the whole altitudinal range where vine commonly grows across Georgia what is hardly true with other territories of Meskheti, Samtskhe in particular, where vine grows only at certain hypsometric steps.

There is another noteworthy fact – in present-day Georgia, vine grows at 1200 (1340) m above sea

D. Nikolaishvili et al.

level, while as the Great Register of Gurjistan Governorate states, it grew even higher, in particular, the vineyards in the gorge of the Olaverdi River (the Paravani basin) reached 1900-1940 m above sea level [12]. If observing modern climatic conditions, we will be sure that in such areas, growing even early vine varieties is virtually impossible. The average temperature of the coldest month of the year is -8-10°C and the absolute minimum is -38°C. Therefore, we can suppose that people used to bury vine in winter. However, this technique allowed growing vine only at some places and not developing the vine-growing as a branch.

Evidence of developed vine-growing in Meskheti

The facts of widely spread vineyards and well-developed branch of vine-growing in Meskheti are strongly evidenced, and as mentioned above, the old Turkish Population census books are the primary evidence. However, due to few numbers of villages charged with vineyard taxes (and due to little taxes as well), we considered it necessary to use other evidences as well. Archeological remnants are one of the undoubted evidences. Clay amphorae buried in earth, wine presses, wine bowls and prints of vine leaves and grape pips were found at different locations: Bagebi, Gugata, Vardzia, Idumala, Ikhtila, Minadze, Oshora, Okhera, Ude, Sadzeli, Toloshi, Tsira, Tsnisi, Chobiskhevi, etc. [5-7, 13].

They find old vine roots in Meskheti even today. What is most important, Meskheti is outstanding for a great number of cultural indigenous vine varieties what is an undisputed evidence of a great tradition of centuries-long growing and cultivating of this culture. Unfortunately, this is hardly true with the part of Meskheti on the modern territory of Turkey. Archeological data are also quite scarce. Therefore, the remnants found on the territory of historical Meskheti are of a particular interest. For instance, vine jars or different shapes and capacities are found buried in ground in almost all villages of Ligani gorge (an area in the lower reaches of the Chorokhi River, south of Machakhela). As per the oral traditions, they were made locally as well, but were mostly delivered from Borchkhi. Even wine and grappa were found in many of them [15].

Centuries-long vine-growing tradition in Meskheti is also evidenced by the fact that the local people were much familiar with vine culture and used to successfully select various vine species for concrete natural local conditions. Traditionally, farmers used the slope inclination and exposition and peculiarities of the soils efficiently. In mountainous areas, they often grew vine over terraces. Usually, they did not plant any fruit trees near the vine. However, in order to prevent land slide, at the ends of the terraces, they planted perennial crops, such as walnut, oak, chestnut and other big trees. They used to deliver fertile soil from the river floodplains and manure to the terraces. Over the terraces in Meskheti, they grow low-growing vine. The vines were planted at the bottom of the terrace wall so that its sprouts would spread over the wall and grapes would also ripen there. Thus, vine did not need any support.

In Meskheti, people used to make terraces in two ways: terraces without walls (lari)- arranged over the slopes with 8-10° inclination surfaces and walled terraces (darija) - arranged over the slopes with greater inclinations. Due to the little inclination of the relief the lari did not need any walls. The situation was quite different in the case of darija. It was arranged on steep slopes along river gorges in order to use the river water for the soil irrigation. For instance, the darijas in Khertvisi were irrigated from the River Paravani. The water flew along several hundred meters through a special channel made of stone to the vineyards and here it had switchers at the head of every terrace to run the water to it. The channel was constructed in such a way that the water flew from the highest terraces down to the lower ones [12]. Vine was mostly grown on the terraces with stone walls, together with fruit trees. As for such terraces, they were provided in the gorges of the Rivers Chorokhi, Mtkvari and their tributaries.

For centuries, people followed this tradition and passed it across generations. However, the situation changed later: the terraces turned desolate in the Soviet years, as they were inaccessible for heavy techniques, while in Turkey, they were destroyed due to the decreased scales or ultimate demolition of the branch of vine-growing. Old artificial terraces have survived at some places to date. However, their trace has disappeared at many locations - they were either washed down by torrents, or covered with forests. Therefore, the terraces on the territory of historical Meskheti are of a particular interest. For instance, S. Timofeev talks about terraces in Artvini environs, which the people made over the slopes due to insufficient land or mountainous relief and grew magnificent vine varieties [16].

Vine being one of the major agricultural crops and a religious symbol not only in Meskheti, but also all over Georgia, is evidenced by ancient Georgian ornaments with vine leaves and grape decorations, ornaments and frescoes used as the decorations of many Christian cult buildings. The Zarzma, Vardzia, Oshki, Bana, etc. are some vivid examples.

In Meskheti, like all over Georgia, customs and traditions associated with vine culture have survived. People used wine as a ritual drink for many different celebrations.

Rich ampelographic Georgian language, including Meskhi terms, is the primary evidence of well-developed vine-growing and farmers' favorable scrutiny in this region. The vocabulary of Meskheti is primarily associated with vine, e.g. with individual parts of vine, shape and size of vine grains, vine growing peculiarities, terms of the first waking and further growing of vine, diseases, etc. There are also very many terms describing the rows of vineyards and spaces between them, vine stakes, etc. New sprouts of vine branches were called "Chavli" in Ajara, while they called it "Deda-Vasi" (Mother Vine) in the rest of Meskheti territory; for wild vine they used terms "Useless vine" and "Bad-luck vine", respectively [17]. Even at different places on the territory of Meskheti, people used different terms to denote the same objects. For instance, in Ajara they called wild vine not only useless vine, but also forest vine, wild vineyard, wild grape, Krikina, etc.

Vine varieties in Meskheti

Growing vine depends on two important circumstances: 1) natural factors (mostly, orographic, climatic and soil conditions), and 2) anthropogenic factors (totally determined by a man). An important and leading rile of the natural factors is undoubted and a number of works have been dedicated to this topic. Much fewer are the works considering anthropogenic factors. Out of anthropogenic factors, it is important to identify how efficiently the whole complex of optimal natural conditions necessary to grow vine is chosen: the orographic, climatic and edaphic conditions; vine-growing tradition (distance between the plantings, distance between the rows, etc.); seasonality of vine-growing and caring, wine-making technique, etc.

Selecting optimal environmental conditions for vine is immediately associated with centuries-long farmers' knowledge and experience and folk traditions. Besides, anthropogenic factors often differ across the regions, even within the limits of the same country. This is particularly true with Georgia, the country with extremely diversified natural conditions and culture, diverse botanic and ampelographic features and properties of vine varieties, as well as rich and diversified experience of vine-growing. However, quite often, centuries-long experience gets forgotten: the techniques to choose the right location or village to grow concrete vine varieties to make best wine are often forgotten, with some exceptions. This is why it is important to analyze various sources and discover the forgotten traditions of vine-growing and wine-making and introduce them to practice.

As for the old Turkish Population census books, they say nothing about vine varieties. They only mention vineyard plots. Neither do other historical documents give any valuable data about this topic. Consequently, based on various sources of a later period and by considering the natural conditions, we may talk about the vine varieties spread in the given period. Besides, it should be noted that many varieties have had their names changed from Georgian to the Ottoman ones. Therefore, a full picture is impossible to restore. For example, the name "Tskhenis-Dzudzu" was replaced by "At-Memesim" and "Khanum-Barmaghma" (Lady's finger in Turkish), "Saliklevi" was replaced by "Sirklev", "Meliskuda" was replaced by "Melviskvit", "Kharistvala" was replaced by "Oqvim-Gozim", etc. [18].

As per D. Bakradze, they mostly grew high-growing vine in Ligani gorge, like in neighboring Ajara and Shavshet-Klarjeti. All grape varieties grew there and they were set growing on high trees [19].

N. Marri also talks about grape varieties in Shavshet-Klarjeti [20]. He names 20 grape varieties and gives their brief ampelographic description. At some points in his work, he even names their locations.

More thorough data are given in the works by S. Timofeev, Er. Nakashidze and St. Menteshashvili. Based on them, Iv. Javakhishvili listed the following grape varieties: white/pink varieties (Khopaturi, Klarjuli, Mtsvane, Tsvite, Chichibe, Bagis Kurdzeni (Garden Grapes), Tskhushi, Brola, Butkoi, Burdzgla, Tetri Kurdzeni (White Grapes), Llikana Kurdzeni) and black/red varieties (Kharistvali, Tskhenis-Dzudzu, Chkhaveri, Mekrenechkhi, Jineshi, Chodi, Satsuri, Matanauri, Makhaturi, Oriona, Mtevandidi, Shavi Kurdzeni (Black Grapes), Shavshuri, Povnili) [18]. As per the records by S. Timofeev and N. Marri, white grapes: Khevarduli, Tskhenis-Dzudzu, Meliskuda, Mtsvanura, Soreki, Orjokhuli, Gorgouli, Tskaltetuli, Alichelebi, Oqviz-Gozi (Turkish for "Kharistvali"), Stambul-Vazi, Turvanda (Persian/Turkish for "Adreuli" ("Early Varieties") and black/red grape varieties: Butko, Tskhenis-Dzudzui, Shishveli, Jghe, Shavropi, Saperavi, Saliklevi, Orjokhuli, Khalturi, Akhalaki, Jineshi, Pundukh-Vizvim, Dervish-Ali commonly grew in Shavshet-Klarjeti [18].

It is known that some names of grape varieties indicate their origin. Such names are many on the territory of Georgia. For instance, Ivane Javakhishvili names some grape varieties in Meskheti, four in each region: In Ajara (Matanauri, Klarjuli, Keduri, Khopaturi), in Shavshet-Klarjeti (Shavshura, Klarjuli, Orjokhuli and Tskaltetuli), in Chaneti (KapisAnnals of Agrarian Science 17 (2019) 433 – 441 toni or Kapito, Opoura, Atinuri and Kvapaturi or

toni or Kapito, Opoura, Atinuri and Kvapaturi or Khopaturi) [18]. As for Ligani Gorge, such varieties as Livanuri, Shavshuri, Orjokhuli, Singoturi, Istambulai (Chaushi) grew widely there [21].

It is noteworthy that Ivane Javakhishili named Chaneti as the center of creative vine-growing in west Georgia after Egrisi and Argveti, whose contribution is outstanding if considering that grape variety Kabistoni or Kapito growing all over Georgia must have been spread from Chaneti to the rest of the country [18].

Based on the above-listed sources, we may contemplate about the vine varieties spread on the territory of historical Meskheti (Table 1).

Vine varieties	Black/red					White/pink			
	Ajara	Shavshet- Klarjeti	Chaneti	Samtskhe	Vine varieties	Ajara	Shavshet- Klarjeti	Chaneti	Samtskhe
Akhalaki		+			Alichelebi		+		
Butko	+	+			Bagis Kurdzeni	+			
"Tamaris Vazi" /				+	Bezhana / Chreli /				+
"Tamaris Tsremlebi"					"Mosaika"				
Matanauri	+				Butko	+			
Makhaturi	+				Brola	+			
Mekrenchkhi	+				Burdzgla	+			
Mtevandidi	+				Gorgouli		+		
Orona	+				Tavdakiduli				+
Orjokhuli		+			Tavtseskhla				+
Povnili	+				Tita Meskhuri				+
Saliklevi		+			Klarjuli	+			
Saperavi		+			Kolosha		+		
Satsuri	+				Meliskuda		+		
Shavi Kurdzeni	+				Mtsvane/Meskhuri	+			+
					Mtsvane				
Shavropi		+			Mtsvanura		+		
Shavshuri	+				Orjokhuli		+		
Shishveli		+			Oquz-Gozi		+		
Chkhaveri	+				Roketula				+
Tskhenis-Dzudzu	+	+		+	Samariobo				+
Chodi	+				Saparuli				+
Khalturi		+			Soreki		+		
Kharistvala	+	+	+		Stambul-Vizvim		+		
Jineshi	+	+			Chichikhe	+			
Jghe		+			Tskhenis-Dzudzu				+
					Chkhushi	+			
					Tsvite	+			
					Tskaltetuli		+		+
					Kharistvala				+
					Meskhuri				
					Khevarduli	+			
					Khopaturi		+		

Table 1. Major vine varieties spread on the territory of historical Meskheti

Reasons for decreased vineyard areas

A number of scientific literary sources state about the decreased vineyard areas in Meskheti. An accent is made on the raging of foreign invaders and Islamization of the local people for centuries. "Due to the Islamization of local people, the branch of vine-growing, which was well developed at one time, was destroyed. As for wine-making, it was ultimately suppressed because of the ban of wine drinking, and almost all famous local grape varieties became extinct" [11, 22, 23]. This fact is referred to in a number of historical documents and other scientific works [6, 18, 10, 23, 13].

We support the fact that the conquest of this territory of Georgia by the Ottomans must have resulted in the diminution or total extinction vine-growing, the branch well-developed before. As it is known from the history, vine was invaluable material and spiritual wealth of a Georgian man and therefore, foreign invaders always tried to destroy it. The situation was aggravated by the fact that the religion forbade the Ottomans to drink wine and this was one more cause for them to destroy vineyards.

However, not only political processes must have been the cause of vine destruction. We think that the natural conditions also played an important role in reducing the vineyard areas. In particular, we talk about the climate cooling in the XIII-XVIII centuries. This stage glaciation reached its peak at the beginning of the XIX century [24]. Besides, the palynological studies [25] demonstrated that the period following the XVI century was characterized by climate cooling followed by short (40-year-long), but severe climatic conditions at the turn of the XVII century resulting in the extinction of vine-growing in South Georgia. This makes us think that diminution and extinction of vine-growing and wine-making in this region of Georgia was resulted not only by the political situation. Rather, it was a natural process as well. However, it is clear that the political situation also played a certain role in this respect [12].

Conclusion

Despite the fact that according to old Turkish Population census books, vineyards grew only in few villages of Meskheti (particularly in historical Meskheti left beyond the territory of present-day Georgia), it may be said for sure that vine must have been one of the leading cultures there. The reason for such a statement is the scattered nature of the vineyards all across the territory of the Governorate, survived only as fragments of the vineyard areas, which were so vast sometime in the past.

As per the old Turkish Population census books, it becomes clear that the vineyards grew in the Nahiyesis and villages much distanced from one another. Such a scattered nature in a couple of villages in the Mtkvari and Chorokhi River basins must be considered as undisputable evidence of vine-growing being a leading branch in the past in the given area. Such scattered distribution of the vineyards cannot be explained otherwise. At the same time, we may suppose that vine would have been survived in some of those villages of which the Register says nothing. We mean small number of vine plantings, which were not taxed due to little harvest.

Most of villages where vine grew widely, are today a part of present-day Georgia, though in most of them, vine-growing is not developed at all. It is interesting that vine grew even further south, in the upper reaches of the Chorokhi River and in the basins of the rivers Oltisistskali, Banistskali and Bardusistskali (presently, in Turkey). Not only doesn't vine grow there, but the area does not offer any favorable climatic conditions for vine-growing.

Acknowledge

The authors cordially thank the Shota Rustaveli Science Foundation for support, under whose financial aid it became possible to accomplish the present work within the scope of project "Mapping and analyzing Georgian cultural heritage of south-west Georgia according to old Turkish Population census books", Grant #HE-18-448, 26.07.2018).

References

- The Grand Book of Gurjistan Governorate (Vilaetis), dated by 1574. Translated from Turkish into Georgian by N. Shengelia. Tbilisi, 2016 (in Georgian and Ottoman Turkish).
- [2] The Grand Book of Gurjistan Governorate (Vilaetis)", dated by 1595. Translated from Turkish into Georgian by S. Jikia, Publishing house and printing house of Academy of Sciences of the Georgian SSR, Tbilisi, 194 (in Georgian and Ottoman Turkish).
- [3] Big and Brief Books of Ajara Liva (District). Translated from Turkish into Georgian by Z. Shashikadze and M. Makharadze, Orienti, Tbili-

si, 2011 (in Georgian and Ottoman Turkish).

- [4] The Great old census book of Tbilisi Governorate (Vilaetis) of 1728. Translated from Turkish into Georgian by S. Jikia and N. Shengelia, Tbilisi, 2009 (in Georgian and Ottoman Turkish).
- [5] L. Beriashvili, Traditions of soil management and protection in Georgia, Metsniereba, Tbilisi, 1989 (in Georgian).
- [6] G. Beridze, Georgian Vine and Cognac. Sabchota Sakartvelo, Tbilisi, 1965 (in Russian).
- [7] T. Chikovani, Zemo Kartli, Sabchota Sakartvelo, Tbilisi, 1987 (in Georgian).
- [8] S. Cholokashvili, Chakhnashvili. Material for study of Georgian vine cultivars, Directory of Agronomy, part I, 3rd Typography and Poligraphy, Tbilisi, 1929 (in Georgian).
- [9] Iv. Javakhsivhili, Map of Botanical-agrarian Areas of Georgia, Georgian Book, 1930. Scale 1: 3,000,000 (in Georgian).
- [10] N. Ketskhoveli, Agriculture Zones of Georgia. Publishing house of Academy of Sciences of the Georgian SSR Tbilisi, 1957 (in Georgian).
- [11] N. Ketskhoveli, M. Ramishvili., D. Tabidze, Ampelography of Georgia., Publishing house and printing house of Academy of Sciences of the Georgian SSR, Tbilisi, 1960 (in Georgian).
- [12] D. Nikolaishvli, D. Sartania, A. Ujmajuridze, The retrospective image of vine distribution on the background of Samtskhe-Javakheti, International J. of Scinetific Research (IJSR), vol. 5, issue 3 (2016) 519-523.
- [13] Sh. Tsikvadze, Modern state of vine-growing and developmental prospects in Meskheti, Publishing house and printing house of Academy of Sciences of the Georgian SSR, Tbilisi, 1958 (in Georgian).
- [14] Vakhusti Bagrationi. Description of the Kingdom of Georgia (Geography of Georgia). Ed. T. Lomouri, N. Berdzenishvili, Publishing House of TSU, Tbilisi, 194 (in Georgian).
- [15] S. Makalatia, Meskhet-Javakheti (Historical-ethnographic essay). Federation Publishing House, Tbilisi, 1938 (in Georgian).
- [16] S.N. Timofeev, An Essay on Viticulture in Batumi and Artvin Districts, Typography of Koslovski, Tiflis, 1896 (in Russian).
- [17] L. Asatiani, Georgian Vocabulary Related to Vine Culture, Science, Tbilisi, 1978 (in Georgian).
- [18] Iv. Javakhishvili, Economic History of Georgia, Ivane Javakhishvili, Works in 12 volumes, vol 5. GNAS, Tbilisi, 1986 (in Georgian).

- [19] D. Bakradze, Archaeological trip to Guria and Adjara. Sabchota Achara, Batumi, 1978 (in Georgian).
- [20] S. Marri, Trip of N. Mari to Chawshia and Klardzhiya, GNAS, 1949 (in Russian).
- [21] R. Malakmadze, Ligani Gorge. Artanudji, Tbilisi, 2008 (in Georgian).
- [22] M. Ramishvili, Ampelography. Ganatleba, Tbilisi, 1986 (in Georgian).
- [23] A. Proneli, Great Meskheti, Marikhi, Tbilisi, 1991 (in Georgian).
- [24] R. Gobejishvil, V. Kotliakov, Glaciology (The glaciers). Universali, Tbilisi, 2006 (in Georgian).
- [25] L. Bitadze, D. Chitanava, Sh. Laliashvii, E. Kvavadze, in: Questions of ethnic entity of the pop).lation of Kartli region and changes of anthropological type from III millennium b.c. through XX a.d. Publishing House "Meridiani", Tbilisi, 2011, pp. 470-576 (in Georgian).